

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

1-1-2009

The effect of mental models on creating organizational alignment around a change vision

William A. Brantley Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the <u>Public Administration Commons</u>

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

This is to certify that the doctoral dissertation by

William Brantley

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee
Dr. Dale P. Swoboda, Committee Chairperson,
Public Policy and Administrations Faculty

Dr. Jason Lum, Committee Member, Public Policy and Administrations Faculty

Dr. Gary Kelsey, Committee Member, Public Policy and Administrations Faculty

Chief Academic Officer

Denise DeZolt, Ph.D.

Walden University 2009

ABSTRACT

The Effect of Mental Models On Creating Organizational Alignment Around A Change Vision

by

William A. Brantley

M.B.A., Jones International University, 2002 M.A., George Washington University, 1996 B.A., Eastern Kentucky University, 1990

Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Public Policy and Management

> Walden University August 2009

ABSTRACT

The communication of an organizational change vision is a key to the success of organizational transformation. Theorists have prescribed models of how to make change vision communication successful but these models have no empirical data to support them. The purpose of this study was to explore the efficacy of change agents in communicating a change vision that compels employees to accept a perception of reality (mental model) that aligned with the change agents' vision. A case study of the merger of two metropolitan agencies was conducted to examine the relationship between the communication of a change vision and its effect on organizational change. The primary change agent and several organizational members affected by the transformation were interviewed. Primary and secondary organizational documents concerning the merger were collected. Mental models from organizational members were compared for similarity to the change agent's vision. Written and oral materials communicating the change vision were analyzed using Automap text analysis software as a measure of effectiveness and to determine which type of communication was most effective. Findings suggest that the change agent's vision was poorly defined and communicated yet the transformation succeeded because organizational members created their own compensating change vision. Social change implications of this study may include challenging unproductive methods of organizational change that have wasted resources and led to organizational misalignment. A better understanding of the communication of change visions will lead to cost savings and more effective and efficient change efforts that benefit managers, employees and the customers of public agency services.

The Effect of Mental Models On Creating Organizational Alignment Around A Change Vision

by

William A. Brantley

M.B.A. Jones International University, 2002M.A. George Washington University, 1996B.A. Eastern Kentucky University, 1990

Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Public Policy and Management

> Walden University August 2009

UMI Number: 3369651

Copyright 2009 by Brantley, William A.

All rights reserved

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.



UMI Microform 3369651
Copyright 2009 by ProQuest LLC
All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest LLC 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106-1346

TABLE OF CONTENTS

LIST OF TABLES	V
LIST OF FIGURES	vi
CHAPTER 1: INTRODUCTION TO THE STUDY	1
Introduction	
Statement of the Problem	2
Background	3
Purpose of the Study	7
Significance of the Study	8
Nature of the Study	11
Research Questions	13
Conceptual Framework	13
Definitions	16
Assumptions	17
Scope and Limitations of the Study	19
Why Public Agencies Were Chosen for This Study	
The Public Agency Chosen for this Study	
Limitations of the Study	
Summary	22
CHAPTER 2: LITERATURE REVIEW	
Organization of Literature Review	
Relation of the Literature Review to the Problem Statement	
Part 1: Brief Survey of the Major Themes in Organizational Change	25
Theme One: Organizational Change	
Theme Two: Change Process	
Theme Three: Change Leadership	33
Theme Four: Resistance to Change	36
Theme Five: Change in Government	39
Part Two: Theoretical Concepts Relevant to the Theoretical Basis for the Case	
Study	43
Concept One: Vision	44
Concept Two: Communication	49
Concept Three: Mental Models	55
Concept Four: Team Cognition	59
Summary	67
0	
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY	
Method of Inquiry	
Selection of the Case Study	71

Data Collection	71
Data Analysis	
Establishing Validity	
Internal Validity	
External Validity	79
Summary	80
CHAPTER 4: DATA ANALYSIS	0.1
Introduction	
The Data Gathering Process	
Research Question One—Mental Model Alignment	
External Change Vision	
Internal Change Vision	
Third Party Change Vision	
Communication Methods	
Automap Analysis	
Research Question Two—Message Design Logic Analysis	
Message Design Logic Communication Analysis	
Communication Analysis	
Persuasiveness of Communication	
Research Question Three—Change Vision Alignment	
Does the Effective Communication of the Change Vision Lead To Alignment?.	
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS	
Overview	108
Findings	
Organization Alignment Occurred	109
Poor Internal Vision and Poor Communication	
Compensating Change Vision	
Tangible Social Change	
Recommendations for Further Study	
Recommendations for Actions	
Reflections by the Researcher	
Conclusion	122
REFERENCES	124
APPENDIX A: Mental Model Interview Questions	132
APPENDIX B: Interview 46	135
APPENDIX C: Interview 47	136

APPENDIX E: Interview 50	143
APPENDIX F: Interview 51	148
APPENDIX G: Interview 52	151
APPENDIX H: Interview 53	154
APPENDIX I: Interview 54	159
APPENDIX J: Interview 55	160
APPENDIX K: Automap Preprocessing Delete List	163
APPENDIX L: Mental Model 0	164
APPENDIX M: Mental Model 1	168
APPENDIX N: Mental Model 2	173
APPENDIX O: Mental Model 3	174
APPENDIX P: Mental Model 4	181
APPENDIX Q: Email from Mayor's Office Concerning the Merger	183
APPENDIX R: Merger FAQ (Retrieved off the intranet)	185
APPENDIX S: Meeting Document from Forum on Metro Archives Merger held by Third-Party Stakeholders	189
Curriculum Vitae	194

LIST OF TABLES

Table 1. General Statistics of the Mental Models 1 through 4	.90
Table 2. Paired Comparisons Between Mental Models	.97
Table 3. The Top 10 Concepts in Agreement Between the Mental Models	.99

LIST OF FIGURES

Figure 1. Theoretical Construct for the Case Study	15
Figure 2. Mental Model 0. The Change Vision	92
Figure 3. Mental Model 1	93
Figure 4. Mental Model 2	94
Figure 5. Mental Model 3	95
Figure 6. Mental Model 4	96

CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

Organizational change is one of the most studied subjects in management. In Fernandez and Rainey's (2006) survey of the literature, they found over 1 million articles relating to organization change in general. There seem to be fewer articles that deal with organizational change in public administration, but there is still a substantial number to indicate that it is a major issue in public administration research (p. 168). As the authors found, "this vast body of work abounds with complexities, including multiple and conflicting theories and research findings and a good bit of inconclusiveness" (Fernandez & Rainey, 2006, p. 168). Fernandez and Rainey argued that a new research agenda is needed to resolve conflicts between the competing theories and to provide "large-sample data sets of organizations at different levels of government and in different public management settings" (p. 173). They specifically stressed the need for research in eight factors that are common to the numerous change processes, such as establishing a need for change, creating a change plan, and gaining internal support for change (pp. 169-173).

Establishing the need for change is Fernandez and Rainey's (2006) first factor for research and is the topic of this study. The first requirement for initiating organizational change is to convince organizational members that the change is needed. Change agents accomplish this by creating a vision of how the organization will function once the change has been successfully implemented and then communicating this vision to all organizational members who will be affected by the change. Resistance to change is endemic in organizations, especially public organizations (Caluwe & Vermaak, 2003, pp.

8-9). To overcome this resistance, change agents must effectively communicate the change vision to enlist the support of a majority of the organizational members (Kotter, 1996). Black and Gregersen (2003) argue that an effective change vision convinces organizational members to replace their current mental map of organization in favor of the new mental model represented by the change vision. The possible connection between the creation of a change vision, the communication of the change vision, and organizational alignment is what prompted this study.

Many change researchers agree with the importance of vision and the communication of vision but little empirical data exists to explain why communication is important, how communication of the vision influences organizational members, and the process by which organizational members alter their mental models in alignment with mental model of the change vision. Thus, the purpose of this qualitative study is to explore the processes involved in the communication of change vision.

Statement of the Problem

Researchers agree on the importance of communicating a change vision in the organizational change effort (Fernandez & Rainey, 2006, p. 169; Gill, 2003, pp. 312-313). Even so, the literature on this issue is only prescriptive and consists mainly of anecdotal evidence to demonstrate the effectiveness of various communication methods in disseminating the change vision (Bennis & Nanus, 1985; D'Aprix, 1996; Denning, 2005; Gargiulo, 2005; Lichtenstein, 2000; Mai & Akerson, 2003). There is also little empirical research on the link between the change vision and organizational alignment

(Caluwe & Vermaak, 2003; Middleton & Harper, 2004; Pietersen, 2002). As the literature suggests, an effective change vision will overcome people's natural resistance to change and persuade them to align their energies to bring about organizational change. Thus, the current gap in the organizational change research is the lack of substantial empirical evidence for the link between communicating a change vision and organizational alignment (Gill, 2003).

To close this gap, researchers need methods to empirically determine the existence of a link between the communication of a change vision and organizational alignment. If the link can be established, then research can be performed to measure the significance of the link on organizational change and how other factors interact with this link. This study describes one research method to establish a link between the communication of a change vision and organizational alignment by examining mental models of the change agent and organizational members. The assumption is that the more similar the mental models are to the change vision the more the organizational members will support the change vision.

Background

The organizational change literature is vast and contains many theories and methodologies for initiating and managing large-scale change (Fernandez & Rainey, 2006, p. 168). There are a multitude of organizational change processes for the change agent to choose from, such as Duck's (2001) "change curve" process, Kotter's (1999) commonly practiced eight-step process, and Anderson and Anderson's (2001) nine-step

process of change that includes four domains and 21 dimensions of change. While the details may differ, most change process models follow a similar pattern.

Fernandez and Rainey (2006) found eight common factors inherent in all organizational change methodologies. The first factor is to establish the need for change, which leads to the second factor of providing a plan for change. Change leaders must also build "internal support for change and overcome resistance" (the third factor) and ensure support from top management (the fourth factor). Building external support is the fifth factor and providing resources for the organizational change is the sixth factor. Factor 7 is the institutionalization of the change and the eighth factor is the necessity to create a comprehensive, integrated approach to change.

Other change theorists also agree that there are common elements to the organizational change methodologies. Goleman et al. (2002) assert that there are three common elements: assessing the culture, creating "resonance around the idea of change," and building change leaders (p. 233). Cloke and Goldsmith (2002) see the need for empowering employees and creating a trusting environment (pp. 103-105). In every change methodology, creating and communicating a change vision is either the first or the second step in the organizational change process (Bennis & Nanus, 1985, p. 33; see also Lichtenstein, 2000).

There is a more extensive discussion on the importance of vision in chapter 2, which establishes how vital vision is to the organizational change process. A vision is a description of the future state of the organization after a successful organizational change effort. The vision provides the need for change as well as the roadmap for the change

(Fernandez & Rainey, 2006, p. 169). According to Kotter (1996), the most important skill of a leader is the ability to create a change vision (p. 72). A change vision helps organizational members to overcome the natural resistance to change and motivates people to abandon their old ways of working in favor of the new vision of the organization (Caluwe & Vermaak, 2003).

Some researchers argue that the vision's power stems from its ability to bring about *alignment*. "Alignment is displayed by a shared understanding, common orientation, common values, and shared priorities" in pursuit of the change vision (Gill, 2003, p. 310). According to Gill, alignment is what distinguishes change leadership from change management and is fundamental to the success of the change effort as people are compelled to share the vision (p. 313).

Alignment is achieved by empowering people and motivating them to support the new vision (Gill, 2003, p. 316). Thus, the change leader must effectively communicate the vision. According to Gill, the change vision frames a positive message that describes the benefits of the change and persuades people to be part of the change effort. Gill suggests some rhetorical devices in constructing the communication but does not describe the content of the message, the specific communication methods, or even the frequency of communication.

Gill's (2003) advice is reflective of the treatment of the communication of the change vision in the organizational change literature. Change theorists agree that communication is vital to the change effort (Fernandez & Rainey, 2006, p. 169) but there is only prescriptive guidance about creating the communication and seemingly very little

descriptive research about what makes communication successful. D'Aprix's (1996)

Communicating for Change gives a strategic communication model but the author bases this on his own experiences and not on any empirical research. In The Leader as

Communicator (Mai & Akerson, 2003), there are only two pages that offer advice on how to frame the message about change. The rest of the book is more about leadership development than creating communication messages. There is only one empirical study out of the fifteen chapters in Penhallurick's Communicating Organizational Change (1995) and its focus is the relationship between role stress and communication.

Storytelling is a popular topic in organizational communication and appeared to be an area of research for effectively communicating change visions. Denning (2005), a former World Bank executive, is one of the leaders in bringing storytelling to both public and private organizations (see also Denning, 2001). Gargiulo (2005) has also advocated the use of storytelling in organizational communication and especially for organizational change. Both authors write about the power of stories and provide detail on how to create and deliver a compelling story. Even so, organizational storytelling theorists did not offer empirical evidence on the link between the communication of the vision and success of the change effort.

Organizational change is complex (Kotter, 1996; Stewart & Kringas, 2003; Van de Ven & Poole, 1995) and there many reasons for its success or failure as evidenced by the over 1 million journal articles on the subject (Fernandez & Rainey, 2006, p. 168).

According to Fernandez and Rainey, examining the link between vision, communication, and organizational change is one of the 8 areas of needed research in organizational

change because there is little empirical research on the link between the communication of a vision and the vision's ability to bring about alignment (p. 169). The descriptive methods for communicating the vision seem valid but they need testing to determine what communication methods are most effective in bringing about alignment toward the change vision.

Purpose of the Study

The purpose of this study was to explore a possible link between various methods to communicate a change vision and the ability to create an alignment among the members of the organization. Organizational researchers stress the importance of communication in persuading people to support the change vision and to align their efforts with that vision. The literature is replete with many prescriptive theories that researchers rely on to tell change leaders how to effectively communicate the change vision. What is missing is a body of research that provides empirical evidence for this consensus on the links between an effective change vision, communication, and alignment. In this study, the researcher explored the possible link between these three concepts in the change process by using mental model interviews and message design logic content analysis.

A secondary purpose of this study was to provide an experimental method to measure how effectively the change vision was communicated to the target audience. The lack of empirical evidence in the literature leads to the question of how effective the chosen communication methods are. This study used mental model interviews and content analysis software to provide a qualitative measure for the effectiveness of the

communication of the change vision by the change leader. The premise is that the closer the fit of the target audiences' mental models are to the change vision the more likely the change vision will be supported and effectively implemented. This is not to imply that there is an immediate acceptance of an accurately communicated change vision. It is possible that a person who accurately understands the change vision can still reject it while an inaccurate understanding may lead to an unwarranted acceptance. However, having an experimental means to measure the effectiveness of the change vision communication can aid in further research on alignment and the change vision.

Significance of the Study

In terms of knowledge generation, this study will open up a new area of inquiry into organizational change. Based on the literature review for this study, research on the effects of mental models in organizational change is still in its early stages. The literature review also demonstrated that there is no research on the specific types of communication in disseminating the change vision. The Morgan, Fischhoff, Bostrom, and Atman (2002) research on the connection between mental models and risk communication appears to be the only research that demonstrates a link between communication and disseminating a mental model. Even so, the authors do not specify the type of communication that seems to be best in communicating mental models. Thus, the goal of this study was to provide descriptive, empirical data to explore the links between mental models, communicating change visions, and organizational alignment.

The immediate practical application from this study will be the effective design of communication methods so that there is less resistance to the acceptance of the change vision. This research may also answer some issues on how to best design the change vision and aid change agents in a better appreciation of how preexisting mental models should be considered in the creation of the change vision. As discussed in the Statement of the Problem section, there is a great deal of prescriptive advice on effectively communicating a change vision but there seems to be little empirical research that demonstrates the effectiveness of these communication methods.

This study will also produce positive social change in that it may aid in understanding factors that affect organizational change success. According to a number of studies, change initiatives are more likely to fail than succeed (Gill, 2003; Kelman, 2005; Pietersen, 2002; Robertson & Seneviratne, 1995). Rates of success for projects that fulfilled their intended goals, completed on schedule, and within their budget ranges from 20% to 30% (Miller, 2002, p. 360). There are numerous reasons for the high failure rate of change initiatives such as "poor strategy choices" or "inappropriate technology choices" but the most common cause is failure in execution (p. 360). Cloke and Goldsmith (2002) also support the argument that poor execution is a common reason for change initiative failure (p. 261). As they describe the process, there is support for the change effort at first. But when the initiative seems to stall or benefits are not quickly realized, people become disillusioned with the change. Goleman (2002) blames change initiative failure on the change leader undercommunicating the change vision (pp. 232-233).

Understanding the factors that affect organizational change success is vital if governments are to improve the overall performance of their agencies. Due to high-profile government program failures, there has been an increased demand for research in what causes organizational failure (Andrews, Boyne, & Enticott, 2006; Mellahi & Wilkinson, 2004; Meier & Bohte, 2003). This issue is vital because, when government projects and programs fail, the costs can be substantial. An example is the Navy's A-12 Bomber project that was cancelled after an initial investment of 5 billion dollars. Two major factors for the failure of the project were miscommunication and misalignment of the project vision (Stevenson, 2001). Miscommunication and organizational misalignment were also partially responsible for the Challenger and Columbia disasters in which 14 crew members lost their lives (Tompkins, 2005; Cabbage & Harwood, 2004; Vaughan, 1996). There are numerous examples of government failures in which miscommunication and misalignment have played a substantial role (Kelman, 2005; Parry & Proctor-Thomson, 2003; Robertson & Seneviratne, 1995). Without empirical data, it is difficult to determine how much of an impact miscommunication and organizational misalignment has in these and other government failures. Even so, many researchers argue that communication and alignment do play a significant role in the success of organizational change (Fernandez & Rainey, p. 169). Thus, improving the success rate of government change projects will lead to positive social change by saving tax dollars and protecting people and property.

This study will also contribute to public administration change management research by examining one factor, "Ensure the Need [for the change]," that many change

researchers agree is a vital area of research (Fernandez & Rainey, 2006, p. 169). For a change to be successful, researchers agree that the change leader must convince the organization's members that change is necessary and this "begins with a crafting a compelling vision for [the change]" (p. 169). Because the change vision is an integral part of the execution of the change initiative, this study will contribute to the research on how organizational change initiatives fail or succeed.

Nature of the Study

The research unit for this study is a metropolitan government agency that was created as the result of a merger of a city agency and a county agency. Using the case study methodology, primary and secondary documents were collected concerning the conceptualization and communication of the change vision. The primary change agent responsible for the creation of the change vision was interviewed as were organization members who had the change vision communicated to them.

The reason the case study was chosen as the research method for this study is because this is the most appropriate method for "understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534; see also Verschuren, 2003, p. 137). The case study is well suited for this research in how mental models affect the communication of the shared vision for change because the phenomenon must be studied within its real-life context and the boundaries between context and phenomenon are not well defined. There were many variables of interest and multiple sources of evidence that required validation methods such as triangulation to ensure the validity of the findings

(Yin, 2003, p. 13). The case study method was also necessary in this research because of the use of theory to guide the data collection and analysis (p. 14).

The model that Morgan et al. (2002) used in their research on risk communication was used as the basis for this study. In their research, Morgan et al. used a special form of qualitative interviewing to elicit the mental models of a risk event from the study participants. After transcribing the interviews, the authors performed a network text analysis to measure the similarity between the participants' mental models and an expert model of how to deal with the risk event.

This study used Morgan et al.'s research method as the basis for the case studies by treating the change agent's mental model of the change vision as the expert model.

Thus alignment will be the amount of similarity between the change agent's mental model of the change vision and the organizational members' mental models of the change vision.

To provide data for the effects of the different communication methods on alignment, content analysis on the written and oral materials to communicate the change vision was performed. The communication theory of message design logic was used to measure the effectiveness of persuasive communication based on how well the communicator has compelled his or her receivers to accept the goals conveyed by the message (O'Keefe, 1988). The categories of message design logic will be discussed in detail in the literature review section but, briefly, communicators have three choices in conveying their persuasive message. They can simply express themselves without regard to the audience or context (expressive design logic) or express their message while taking

context into consideration (conventional design logic). The highest form of message design logic is when the speaker takes into consideration both the context and the audience (rhetorical design logic). Message design logic content analysis was used to perform a validity check on the findings of the change documentation and the interview transcripts to investigate what type of message design logic was used to communicate the change vision.

Research Questions

- 1. How effective are various communication methods in communicating a change vision as measured in the closeness of fit between the individual's mental model of the change vision and the change leader's mental model of the change vision?
- 2. How does the type of communication method, as a category of O'Keefe's (1988) message design logic, affect its ability to persuade the individual to support the change effort as expressed by the change vision?
- 3. Is there a positive alignment between the accurate understanding of change vision and the willingness to align with the change vision?

Conceptual Framework

The theories that guided this study are mental models and message design logic.

Mental model theory describes how people process their perceptions of reality into a

mental construct that guides their actions and decision making (Reger, Gustafson,

Demarie, & Mullane, 1994, p. 568), whereas message design logic explains why some messages are more persuasive than other messages (O'Keefe, 1988). Morgan et al.'s (2002) research design of mental model-based risk communication is the foundation of this study because of their emphasis on measuring how communication can change a person's perceptions by measuring the closeness of fit between the person's mental model and the expert's mental model. For purposes of this study, it is assumed that the process by which people adopt the expert model of a risk event is the same as the adoption of a change vision. This study examined the alteration of pre-existing mental models in favor of a well communicated and compelling mental model as the process by which alignment occurs.

To further explain how alignment occurs, this study used the communication theory of message design logic to measure the persuasive effects of the change agent messages about the change vision. Message design logic is built on the premise that communicators have goals for their communication and thus they design their messages to achieve their goals (O'Keefe, 1988). Communicators can be direct about what they want to achieve, craft their messages to fit the context, or (usually the most persuasive) craft their message with the goals of their audience in mind. As pointed out before, there is widespread agreement among researchers that communication is important but very little research on how and why communication is effective. By using message design logic theory to code the messages based on their persuasive design, this study examined the question of the link between effective communication and organizational alignment

through the alteration of mental models. Figure 1 illustrates how these two theories are combined as the guiding theory for the case study:

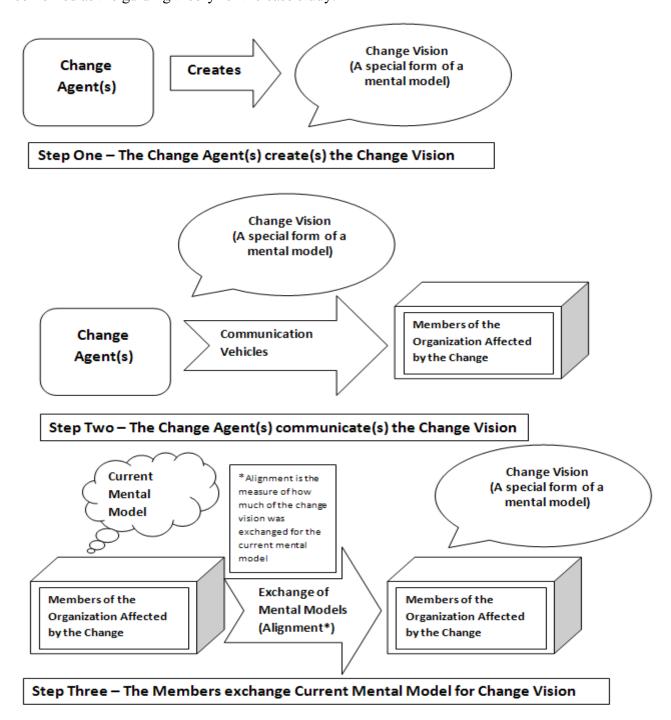


Figure 1. Theoretical construct for the case study.

As the figure demonstrates, the change agent creates the change vision that itself is a special kind of mental model. The change agent communicates the change vision to the organizational members who already have mental models that describe the current state of the organization. Alignment occurs when the current mental models reflect the change vision.

Definitions

Many of the following concepts are discussed in detail in chapter 2. What follows are the operational definitions that will be used in the study:

Alignment: "A shared understanding, common orientation, common values, and shared priorities" in support of the proposed change (Gill, 2003, p. 310).

Change: According to Anderson and Anderson (2001), there are three types of change. Developmental is the improvement on an existing process, transitional replaces the current situation with a known new situation, and transformational is a significant shift from one state to another that requires a new culture and employee mindset (pp. 3-4). For the purposes of this study, the transformational definition of change will be used.

Communication: For the purposes of this study, communication will be the transmittal of messages about the change vision and the change process in oral and written form and through all forms of media.

Mental model: A cognitive process by which a person creates an internal representation of their perceived reality (Wind & Crook, 2005, p. 9) and uses that representation to "describe, explain, and predict situations" (Burns, 2005, p. 17).

Mental Model Interview: Qualitative, open-ended interviews that are designed to elicit a person's mental model about a particular topic. The purpose of the interview is to provide a transcript that can be analyzed by software to determine closeness-of-fit to another mental model (Morgan et al., 2002, p. 20).

Message Design Logic: A communication theory in which messages are placed into three different categories depending on the goal of the speaker and if they consider the context and their audience in constructing the message (O'Keefe, 1988).

Persuasiveness: For purposes of this study, persuasiveness is the degree of similarity between the change expert(s) mental model of the change vision and any given organizational member's mental model of the change vision as measured by the Automap software.

Vision: A mental model of the future state of the organization after the successful implementation of the proposed change (Nutt & Backoff, 1997).

Assumptions

The first assumption in this study was that mental model interviews are an effective method for eliciting an accurate understanding of the participant's conceptions of the change vision. Chapter 3 references support in the literature for this type of qualitative research as being effective in extracting mental models from interviews and text but the quality of the data depends on the skill of the interviewer. Mental model interviews were successfully used by Morgan et al. (2002) in their research on mental model and risk communication but they stressed the difficulty of conducting the

interviews and the need for practicing mental models before attempting them in field research.

The second assumption was that the communication of the change vision from the change leader is a major factor in the target audiences' formation of the mental model of the change vision. There are a number of factors that could influence the individual's mental model such as discussions with coworkers, rumors about the proposed change, and past experiences with other organizational changes. Along with this are the individual's preferences in how they wish to receive communication. Some members may prefer written communication while others prefer auditory messages.

The third assumption was that people rely on their mental models to understand their organization and their work role. The section on mental models in chapter 2 provides support for this view but the literature is relatively new and there is still further research needed to demonstrate the influence of the person's mental models on their actions. Specific to this research is that a change vision is equivalent to the expert model which is the basis for Morgan et al.'s (2002) research.

The fourth assumption was that communications could be categorized into one of the three message design logics. To properly categorize the messages, the researcher needed to be able to determine the sender's intent in communicating the message and if the speaker considered the communication context. It is possible to miscategorize a communication if was ambiguous or a fragment of a larger message. Thus, the researcher considered the situation and circumstances surrounding the communication to better categorize the message.

Scope and Limitations of the Study

Why Public Agencies Were Chosen for This Study

The research unit for this study was limited to a public agency because most of the prescriptions for effecting change in public agencies are based on lessons learned from the for-profit sector. There is merit in learning from experiences in the for-profit sector but, as Walshe, Harvey, Hyde, and Pandit (2004) argue, the "fundamental differences in purpose, mission, culture, and environment" prevent the change techniques from being directly transferred from the for-profit sector to the public sector (p. 207). There are six major differences between for-profit and public organizations that greatly affect the change effort.

First, a failed company can be shut down, but it is almost impossible to close a failing public agency (Walshe et al., 2004, p. 205). Second, because of the lack of established performance metrics, it is more difficult to determine if a public agency is failing. This leads to the third difference, which is that it is difficult to even pinpoint the symptoms or causes for a public agency's failure. The fourth difference is that the change effort in a for-profit agency is often internally led while change in a public agency is often led from outside the agency. The fifth difference is that the pace of change in a public agency is slower than in the for-profit sector. The sixth difference is that change in the for-profit organization is usually led by one or a few leaders while change leadership in a public agency relies more on consensus among several leaders and stakeholders (Walshe et al., 2004, p. 206).

There is less difference between nonprofits and public agencies than between forprofits and public agencies, but significant differences do exist (Lipsky & Smith, 19891990). The first major difference is that nonprofits can choose their client pool and thus,
can decide not to service selected members of the public. The second major difference is
that nonprofits can afford to be more innovative because of the lessened need to be
equitable in their treatment of the public need. This leads to the third major difference in
which nonprofits can fail much easier than public agencies due to lack of funding or
inadequate training of their employees and leadership. Thus, the lessons learned in forprofit organizational change can be more directly applied to nonprofit organizations than
is the case for public agencies.

The reason for selecting a public agency rather than a for-profit or non-profit organization is that the organizational constraints are substantially different and these constraints have not been addressed in the change management literature. It is possible that these differences are not enough to significantly affect the change process, but without empirical research, this remains an unsettled question.

The Public Agency Chosen for this Study

The specific agency chosen for this study is the Louisville Metro Archives of Louisville, Kentucky. The Metro Archives was chosen because it is the result of the merger of the Louisville City Archives and the Jefferson Office of Historical Preservation and Archives (JOHPA) and thus has substantially completed an organization-wide restructuring of its operations, management structure, and staff. On January 6, 2003, the

City Government of Louisville, Kentucky and the Jefferson County Government were officially merged into the Louisville Metro Government (Fahim, 2006). In response, the management of both archives worked together to develop a plan to merge the archives into one entity. The historical preservation part of the JOHPA was assumed by the Metro Planning Committee while the archives part of JOHPA was absorbed by the City Archives which was subsequently placed under the authority of the Metro Chief Information Officer.

Limitations of the Study

A limitation of this study is that there will be no consideration of the time lag between communicating a vision and the change in the mental model. As the organizational change has been implemented, it will be unlikely that a timeline for the adoption of the new mental model can be established. Another limitation is that only communication from the change agent about the change vision will be considered. Employees may have received communication about the change vision from fellow employees, the news media, and other sources but this study will confine itself to direct communication from the change agent concerning the change vision. However, media stories and similar documents were analyzed as a way of establishing the change agent mental model of the vision.

Summary

The purpose of this study was to provide descriptive data about the role of communication in convincing people to support a change vision. A case study was used to investigate what communication methods and messages are most effective in altering an individual's mental model to align with the change vision created by the change agent. The rationale for this study was to explore the process of the communication of a change vision and its effect the mental models of the change participants.. The secondary purpose of this study is the introduction of mental model interviews and message design logic coding as tools in public administration research.

Chapter 2 of this study will review the literature on vision, communication, mental models, and organizational change. The review is divided into two major parts; the first part is an exploration of key concepts relevant to the study and the second part is a brief survey of the change literature as it applies to this study. The literature review will establish the context for the study and demonstrate how the different concepts relate to each other as part of the theoretical framework. The literature review also further establishes the need for a descriptive approach to the communication of a change vision based on empirical data.

Chapter 3 outlines the research design that was used in this study. The primary methodology is the case study method which consists of three sources of data: qualitative interviews, content analysis of primary documents used in communicating the change vision, and content analysis of secondary documents such as news stories and third-party reports of the change effort. The research design is based on Morgan et al.'s (2003)

research of mental models and risk communication with the change agent mental model of the change vision as a substitute for the expert's mental model of a risk. This section details the method for conducting a mental model interview and how the researcher coded messages according to message design logic theory. A list of interview questions is presented in Appendix A.

The data analysis presented in chapter 4 outlines the study findings. First, there is more than one change vision at work during the merger of the two archives. Second, the communication by the change agents was almost nonexistent for one change vision while more than adequate for the other change vision. Finally, the Metro Archives merger was successfully completed even though the change process did not fit the theoretical models for a successful organizational change.

In chapter 5, the researcher discusses these findings and advances the theory that the employees affected by the organizational change created a "compensating change vision" based on their shared mental model of how archives should function. This compensating change vision allowed for the successful merger of the archives despite what theorists would consider a failed organizational change process.

CHAPTER 2: LITERATURE REVIEW

Organization of Literature Review

The literature review was organized by topic to provide the context for the research. This arrangement was necessary because of the lack of direct research on the interactions between change visions, mental models, and the communication of change visions. The review was divided into two major parts with the first part being a brief survey of the change literature as applied to this study while the second part is an exploration of key concepts that guided the creation of the theoretical framework of the case study. The purpose of this literature review was to demonstrate that previously unrelated fields of research could be combined to provide new insights into the process of creating and communicating a change vision. The literature that deals specifically with the case study method and associated research methods was discussed in chapter 3.

Relation of the Literature Review to the Problem Statement

The literature review served two purposes in guiding this study. First, it explains the major concepts that were investigated in the review: vision creation, dissemination, and acceptance of the change vision. The second purpose was to demonstrate the validity of using Morgan et al.'s (2003) study of mental models and risk communication as a basis for studying how mental models affect the communication of change visions. The first part of the review comprises five subsections that summarize the literature on organizational change as it applied to this study. The second part of the review includes a more detailed examination of *vision*, *communication*, *mental models*, and *team cognition*.

The purpose of the second part was to define the concepts used in the study and to demonstrate their possible relationship with each other in the context of organizational change.

Part 1: Brief Survey of the Major Themes in Organizational Change

Theme One: Organizational Change

This section will give some general concepts of organizational change while subsequent sections will give more detail about the aspects of organizational change relevant to the study. According to a recent article in Public Administration Review (as cited in Fernandez & Rainey, 2006), there are over 1 million journal articles on organizational change in public administration alone which is telling of the complexity of the topic.

In understanding change, researchers have asked why change occurs and what drives change especially when change can be difficult for organizations and their members. As Pietersen (2002) explains by paraphrasing Mark Twain, people realize the inevitability of change but they still fear the turmoil and pain caused by organizational change (p. 32). Pietersen argues that the most opportune time to initiate a change process is when the need for change is just developing. It is at this point when change is least expensive and least disruptive to the organization. Because the need for change is least felt at this time, people are most resistant to the proposed change and prefer the certainty of the current organizational state. The worst time to change is when the company is in

crisis, although this is when people are most open to change (Pietersen, 2002, p. 33; see Reger, Gustafson, Demarie, & Mullane, 1994, p. 576).

A possible explanation for why change is easier to implement in a crisis than in a non-crisis comes from Day and Jung (2000). According to Day and Jung, there are three questions must be answered during the change. The first question is "why the change" (or sometimes "why the change now") with the second question concerning what to change to and the third question being a more individualistic "what's in it for me?' (p. 119).

During a crisis, the need for change is more apparent while the second question can easily be answered with "anything but the status quo." The third question is also easier to answer because a crisis that imperils the organization and peoples' jobs makes survival the key goal of the change. Day and Jung's research indicates that compelling people to change is more successful in a crisis than in a non-crisis (p. 118). Or, as Miller, Johnson, and Grau (1994) argue, "instead of being an impediment to change, a moderate level of anxiety may have positive consequences" (p. 73).

Once change begins, the positive feedback encourages the change effort according to Kelman (2005). The learning curve, although steep at first, gives the person positive feedback while leaders and co-workers also facilitate the change with more positive feedback. If a person is positive about the change, they will often find perceive the change as positive (pp. 119-122). It is incumbent upon the change agent to continue to make the change process as positive as possible.

Change has become a constant in organizational life (Ashmos & Nathan, 2002, p. 199) and this is especially true of public agencies in which many are large organizations

that are complex by nature (Kotter, 1999, p. 52). As Kotter explains, it is the manager's and leader's job to deal with the complexity and initiate change when it is best for the organization. The change leader cannot just impose change from the top down. To be successful, the leader must be aware that the change vision transforms as it diffuses through the organization because the change vision is influenced by the attitudes of the various levels in the organization (Stewart & Kringas, 2003, p. 677). Change leaders must create a change vision but they also must be aware of other visions for change and should be willing to show an interest in these other change visions (Kolzow, 1999, p. 5). Change leaders must view the change vision from other perspectives and create a "disposition of experience" that models the shared change vision (Day & Jung, 2000, pp. 118-119).

Change leaders must also be aware of the power of organizational culture on change (Judson, 1991, p. 31). Culture is manifested in many different ways such as in verbal behavior, physical behavior, practices, and artifacts (Sackmann, 1991, p. 19). The paradox of culture is that it is poor foundation for a change program even though it shapes the way people perform (Stewart & Kringas, 2003, p. 686). Although trust and loyalty are powerful forces in determining a person's attitude toward change, cultural beliefs play a stronger role than the person's trust and loyalty to abstract entities such as "company," "management," "union," and so on (Judson, 1991, pp. 32-33).

How change is perceived is directly linked to people's mental models of the change. If the change participant is not given sufficient information about the change, he or she will still form mental models of the change based on incomplete and, most often,

inaccurate information. These "flawed" mental models can heighten a change participant's resistance to change (Judson, 1991, p. 40). Thus, a change leader must pay careful attention to organizational learning or the "process of collective-meaning creation" as Huzzard and Ostergren (2002) define it (p. S50). Change leaders must encourage reflection about the change by the participants. This will aid the participants in forming accurate mental models of the change vision that will facilitate the success of the change effort (Argyris, 1994, p. 85).

Change has a ripple effect throughout the organization that requires people to change their attitudes and behavior (Judson, 1991, p. 15). Resistance to change nullifies the best efforts of change leaders to initiate change. Thus, the members' support for the change must be gained (p.2). In Miller et al.'s model (1994) of the employee's willingness to participate in organizational change, two variables affect the person's openness to change. The first variable is the person's level of anxiety that is influenced by the need for achievement, need for affiliation, and organizational identification. The second variable, helpfulness of information about the change effort, is influenced by previous information, the perception that "nobody ever tells me anything," role ambiguity, and the knowledge of their coworkers' roles (p. 63).

In light of this model, Kotter's (1996) advice on empowering employee to affect change reduces the level of anxiety while supplying the helpful information employees need to support change. As Kotter writes, the change agent needs to "communicate a sensible vision to employees" while aligning structures, information, and personnel

systems to the vision. The change agent needs to provide training to encourage the change effort and prevent supervisors from undercutting the change (p. 115).

This theme relates to the three research questions because it provides the context for understanding the change process.

Theme Two: Change Process

Change is difficult to measure because it is a process. It is easier to measure objectively the effects of change through changes in organizational performance but the success of the change effort is perceptually based. Even though the top management may view the change effort as a success, the members of the organization may feel that the effort was a failure or only a partial success (Stewart & Kringas, 2003, p. 677). It is this nature of change research that has led to numerous models of the change process in the literature. According to Stewart and Kringas, the many change models can be grouped into two basic types. The "rational" type of change model is concerned with the "planning, problem solving, and execution" areas of change while the second type of change model is centered around the phenomenon of change and its effects on the organization and its members (p. 676). From their studies, Stewart and Kringas developed reasons on why change fails and how change can succeed. Change fails when the initiative "seemed disjointed, faddish, or poorly thought through" (p. 676). The keys to successful change are an appropriate change model, effective leadership, sufficient resources, and attention to communication (p. 686).

Van de Ven and Poole (1995) group the many change process models into four major theories along the number of units involved in the change and the mode of change (p. 520). The constructive mode of change "generates unprecedented, novel forms that, in retrospect, often are discontinuous and unpredictable departures from the past." The prescribed mode "evokes a sequence of change events in accord with a preestablished program or action routine" (p. 522). For the two theories in the prescribed mode, a single entity undergoes a "life cycle" change model while the multiple entities go through an "evolution" change model. Both of these prescribed mode theories presuppose a set series of steps in a controlled process that has a clear beginning and end. In contrast, the theories in the constructive mode have a series of steps that blend into each other and the process seems constantly cyclical (p. 520).

Even though the specifics of the many change process models vary, a general sequence of steps is common to most models. The first step is in motivating change among the organization. In this part of the process, the change agent clearly identifies what is wrong with the current state of affairs and gives a vision of what the future will be like when the current problems are resolved. The change agent enlists others in planning the change effort by building in rewards for support the vision. At the same time, the change agent facilitates the organization's disengagement from the present state (Nadler, Shaw, Walton, & Associates, 1995, pp. 51-54).

The second step is the management of politics of change. The change agent identifies and obtains the support of "key power groups" while using their authority to generate support for the change and build in stability (Nadler et al., 1995, pp. 59-63).

During this step, the change agent creates a coalition that includes key players based on their expertise, credibility, and leadership. It is vital that the coalition is constructed carefully; anyone who could offer opposition either is on the coalition or can easily be nullified by a coalition member (Kotter, 1996, p. 57).

Managing the transition is the third step. The change agent develops and communicates a change vision, creates "transition devices," and develops a feedback mechanism to monitor the change (Nadler et al., 1995, pp. 55-59). As the change process progresses, support grows through the "mere exposure effect" through positive feedback mechanisms (Kelman, 2005, p. 8). The change agent can also increase support through demonstrating continuing commitment to the change. In time, the members will generate their own support as they reduce the dissonance between the new order of things and their support for the past (p. 123).

For purposes of this dissertation, three specific change process models were briefly examined. These change process models were chosen for their relevance to the impact of mental models on the creation of a change vision and the overall change process. Each one demonstrates the significant importance of mental models, the shared vision, and the need for good communication throughout the change process.

The first change process model is based on learning organization theory.

Sugarman's (2001) model is based on changing the members' mental models. Using reflection and dialogue (p. 73), the change agent assists the members in recognizing their mental models of the current state of the organization. The change agent then creates a new mental model—the change vision (p. 69)—and directs the rest of the change process

to communicating the change vision and gaining widespread acceptance of the new mental model.

Isabella's (1990) change process model is also based on replacing one mental model for another (although mental models are called "cognitive structures" in this model). As Isabella writes, "Managers involved in a change need to undergo an alteration of their cognitive structure that facilitates and supports the need to change, the process of changing, and the maintenance of what has been changed" (p. 8). This is accomplished in four distinct stages in which there is a "predominant frame of reference, interpretative task, and construed reality" (p. 31) whereby the person constantly reexamines their beliefs and perceptions to create a new mental model that takes them to the next state of the change process (p. 32).

Kotter's (1999) eight-step change process model is possibly the most familiar of the change models. The process involves demonstrating a need for change, creating a change vision, establishing a change team, communicating the change vision, "empowering employees to act on the visions," and building momentum for the change through short-term wins (p. 7). The real value of this model is Kotter's finding that each transformational change effort has to be specifically tailored for each situation (p. 9). Kotter also demonstrates how many change efforts fail due to problems with the vision such as a lack of a vision (p. 81), obstacles to the vision (p. 85), and undercommunicating the vision (p. 82).

This theme relates most directly with the first research question because it describes the importance of the change vision in the change process and the vital role of

communication. The second research question is also related to this theme because of the findings in the literature that undercommunication or poor communication can cause failure in the change process

Theme Three: Change Leadership

Research has demonstrated that the most important factor in successful change efforts is leadership. Stewart and Kringas (2003) cite several studies to support their thesis that leadership is the most important component of organizational change (p. 676). Thompson, Socolar, Brown, and Haggerty's (2002) research into the collaboration between seven North Carolina counties while they underwent a large-scale change project is supporting evidence that leadership is the major factor in organizational change. Thompson et al., found that among the most important qualities of a change leader were "being able to unite groups around a shared vision," "articulating that vision," and "having good communication skills" (p. 58). Other researchers such as Kotter (1999), Gill (2003), and Albrecht (2005) have also established the importance of leadership in initiating change in public agencies and dealing with the change effort in large organizations.

According to Judson (1991), leaders must possess three skills to be successful in leading change. The leader must be able to identify and analyze problems while determining the objectives of the change. The second skill is the ability to formulate strategies, tactics, and methods to solve problems and accomplish objectives with the

third skill being the capability to create processes to accomplish the objectives and to gain support from others for the change (p. 2).

Although Kelman (2005) believes that leaders are vital to the change effort in the public agency, their real power lies in supporting the organizational members who want change. As described in the section on resistance to change, Kelman believes that it is a myth that people are naturally opposed to change. Kelman posits a change vanguard among the employees of an agency who desire change but do not feel that they have the power to initiate the change. Once a leader signals their support for the change, the vanguard is emboldened enough to sustain the change effort (p.7). Thus, unlike Judson (1991), Kelman believes that leaders are important but only in the support they give and not in any special skills that other members of the organization do not possess.

Other researchers agree that an important part of the change leader's tasks is to demonstrate a commitment to change (Gill, 2003, p. 308). Leaders must also have credibility so that followers will feel motivated to overcome resistance to change and support the leader and his or her vision (Thompson et al., 2002, p. 58). Through a demonstration of commitment and credibility, leaders can better empower their followers during the change effort. As Gill (2003) argues, it is vital for a leader to empower his or her followers to help people exchange their old mental models for the new mental model expressed as the change vision (p. 315). As discussed in chapter 1, Gill only offers general prescriptions on how change agents can empower their followers to accept the new mental models inherent in the organizational transformation.

In order to empower the employees, leaders must be aware that people are affected in three ways by change: operational (changes in behavior), psychological, and social (Judson, 1991, p. 16). Each person also responds differently to change (p. 28) and their responses could be influenced by their workgroup (p. 23). Employees will prefer the security offered by the status quo. Thus, the change agent must encourage the employees to leave the familiar and embrace the change (p. 1). The organizational structure also plays a significant role in empowerment. In a traditional hierarchical organization that is found in many public agencies, people find it difficult to become empowered due to the constraints imposed by the rules, procedures, and regulations of their work environment (Kelman, 2005, p. 27).

Along with empowering employees, leaders must make the case for change in such a way that members will buy into the process. As Day and Jung (2000) write, "only a powerful management group at the center can guide a transformation through the risks and frustrations of the process" (p. 123). To best guide the transformation, leaders create a "story of transformation" that explains the need for the change, what the goal of the change is, and how the organization will reach this goal (pp. 120-122). It is also vital that leaders plan for mistakes and surprises as they play out the transformation story. Change efforts rarely unfold exactly as planned and the change leader must be on guard for undermining obstacles and strong resistance (p. 120).

Pietersen (2002) outlines a similar process in his six rules for change leaders. The first rule is that leaders must create a simple, compelling case for change (p. 34; see also Kotter, 1999, p. 151). This leads into the second rule that instructs the leader to

communicate honestly and constantly throughout the change process (p. 35). The third rule is to maximize participation in the change process from creating the vision to spreading the vision to others. As Pietersen explains, people are more likely to support something they helped create (p. 36; see also Hayes & Allinson, 1998, p. 866; Kotter, 1999, p. 155). In the fourth rule, Pietersen counsels leaders to minimize resistance by working with those who oppose the vision while being careful not to allow the vision to be compromised. If the resistance continues, Pietersen advises the leader to remove those who resist (p. 36). Rule 5 is about generating short-term wins to maintain momentum and to gain support for the change effort (p. 37; see also Kelman, 2005, p. 7; Kotter, 1996, p. 119; Kotter, 1999, pp. 158-159). Rule six restates the need for the leader to be credible by setting a "shining example" (p. 37).

This theme relates to both research questions two and three because it is the persuasive efforts of the change agent that determine the acceptance of the change vision and the willingness of the employees to align with the change vision.

Theme Four: Resistance to Change

There are a number of reasons why people resist change. Resistance can stem from emotional responses such as a "dislike of imposed change" to a "lack of respect and trust in the person or people promoting change" (Gill, 2003, pp. 308-209; see also Pietersen, 2002, p. 34). Resistance can also be from cognitive reasons in which the change participants objectively analyzed the proposed change vision and found it lacking (Nadler et al., 1995, p. 48). Change participants may resist change on ideological grounds

because they believe that the "change violates an important principle or commitment that the organization must stand by" (p. 48).

Some people see change as threatening their political power or competence and thus they begin creating overly positive visions of the current system (Kelman, 2005, pp. 22-23). Alternatively, change participants may resist change by creating mental models that make it difficult for people to notice the signals for change (pp. 24-25).

People express their resistance to change with a variety of responses ranging from passive resistance such as nonlearning, protesting, or working strictly to the letter of rules and regulations. Active resistance can take the form of excessive absences to deliberate sabotage (Judson, 1991, p. 48; See also Miller et al., 1994, p. 59). Nadler et al. (1995) have detected a pattern in change resistance that exists in most change efforts. First, the change is fought with rational arguments that dispute the need for change. Then, people search for targets of blame that are responsible for the current crisis and argue that removing the targets will make it unnecessary to change. Third, gossip increases leading to the formation of factions. From these factions, informal leaders emerge who test the resolve of the change leaders. Once a majority perceives that change is inevitable, they begin aligning with who they think will be the new political powers after the change occurs. The ones that are not as successful in aligning themselves with the perceived winners appeal to personal relationships to protect them after the change (pp. 48-50).

This pattern of resistance is more pronounced during discontinuous change, change that is a complete break with the past toward an uncertain future. Discontinuous change "is traumatic, painful, and demanding on the organization and its people" (Nadler

et al., 1995, p. 37). Discontinuous change requires the destruction of at least part of the current system as multiple and concurrent changes take place all around the organization (pp. 37-39). Discontinuous change often triggers the most active resistance even though it is often in response to a change event that threatens the very survival of the organization.

A question that some change researchers asks is if there is a valid basis for a person's fear of organizational change. Researchers argue that a real and major harm of organizational change is job insecurity. Job insecurity is the "discrepancy between the level of [job] security a person experiences and the level he or she might prefer" (Dekker & Schaufeli, 1995, p. 57; see also Greenhalgh & Rosenblatt, 1984, p. 441). According to Dekker and Schaufeli's research, job insecurity has harmful psychological health affects that cannot be alleviated by any means of training or additional resources (p. 57). In their review of studies on job insecurity, Dekker and Schaufeli found that a majority of the studies indicate that job insecurity could create actual physical harms such as anxiety, depression, and addictive behaviors (p. 58). Even employees who are not directly affected by the change can experience the symptoms of job insecurity if they work with people who are directly and adversely affected by the change (p. 61). Most workers cope by passively "disinvolving" themselves from their work and their organization (p. 58).

In contrast, Kelman (2005) argues that the widely held management belief that people resist change is not always true. In his research on change in public agencies, he found that there is often a "constituency for change" that is ready to be activated when they see a signal from the top. Once the constituency for change receives the signal in the form of a change vision, they drive change from the bottom that often leads the change

effort succeeding. As Kelman writes, "often change need not be cajoled or coerced. Instead, it can be unleashed" (p. 6).

This theme relates specifically to all of the research questions because it concerns possible barriers and opportunities for alignment. There is also some relation to research question two as it affects the willingness of the audience to accept the change agent's persuasive message.

Theme Five: Change in Government

In discussing change efforts in government, it is important to realize that there has been little research on change in public administration. According to Parry and Proctor-Thomson (2003), there has been "minimal empirical analysis of the relationship of key components [individual leadership, culture type, and organizational effectiveness among others] that make up. . .a change strategy" (p. 376). Even so, researchers agree that fundamental change is occurring in public agencies such as "decentralized structures, network and team-based arrangements, and customer-oriented approaches" in response to a more turbulent environment, the collapse of boundaries between organizations, and the greater demands placed on public agencies (Robertson & Seneviratne, 1995, pp. 547-548). Kelman (2005) attributes the need for public agency change due to the public perception that government agencies underachieve. As he argues, "if government is not performing as well as it should, government organizations clearly need some kinds of change. . . to improve performance" (p. 3).

The rationale that government needs to improve its performance has led to a twenty-year effort by governments worldwide to "reorganiz[e], restructur[e], and reinven[t] public services" (Boyne, Martin, & Walker, 2004, p. 190). However, the specific goals and objectives of the change programs in government are often undefined or ambiguous at best thus leading to confusion over what the change effort should achieve and if the change actually succeeded (p. 205). Researchers have established that 84 percent of public sector change efforts have shown some positive results which compares well with the private sector's 89 percent rate of positive results (Robertson & Seneviratne, 1995, p. 549). Even so, there does not appear to be any research in the literature that determines the percentage of government change efforts that were completely successful.

Given that change is inevitable and constant in public agencies, the literature does suggest that change is harder to initiate and sustain in public administration than in the private sector. There are numerous reasons why this may be true but the change barriers can categorized into four main groups: ambiguous goals, constraints unique to the public sector, organizational structures of public agencies, and the unwillingness of public leaders to initiate major change (Robertson & Seneviratne, 1995).

Robertson and Seneviratne (1995) explain that the large number of constituent groups with each having their own goals and agendas will often paralyze the agency from acting on any one goal. Even if a majority of constituent groups supports the change, even one constituent group can prevent change from occurring by applying enough political pressure. Even without a large number of constituent groups, many agencies are

tasked with multiple roles that will also create confusion among goals (p. 548). The goal ambiguity is also increased by the regulatory and procedural restraints imposed on public agencies. Often these constraints are placed on the agencies to insure that all stakeholders are treated fairly and equitably but these same constraints prevent agency leaders from finding innovative ways of meeting challenges (Parry & Proctor-Thomson, 2003, p. 377).

Constraints also influence how public organizations are structured. Kelman (2005) explains that three components of the bureaucracy are designed to ensure fair and equitable treatment of all constituent groups. The first component, "rules," are knowledge structures that impose a certain way to act and think in the public agency (an imposed mental model). Rules defend the organization from the criticism that the agency is not meeting the needs of its constituents but these same rules also inhibit innovation (p. 27; see also Robertson & Seneviratne, 1995, p. 548). The other two components, "hierarchy" and "specialization," reinforce the effect of the rules by compelling people in the agency to act in firmly designated roles and controlling their communication channels (p. 27).

Given that public agencies face conflicting goals, are severely constrained by the demands of their constituent groups, and the very organizational structure defeats change, it is understandable why public leaders are discouraged from enacting fundamental change. As Kelman (2005) explains, leaders would rather add to existing programs because they believe the members of the organization will resist the change. Even when public leaders do initiate a change, they fail to communicate frequently and long enough to stimulate the change vanguard into action (pp. 100-101). This is because both internal politics and external politics impede the change (Robertson & Seneviratne, 1995, p. 548)

and that public leaders who encourage entrepreneurship and innovation are the most heavily criticized (Parry & Proctor-Thomson, 2003, p. 379).

Huzzard and Ostergren's (2002) research supports the idea of the four constraints but their emphasis is on the structure and environment of the public sector. As they explain, most change research is based on the presumption of "homogeneous shared values" in an organization (p. S47). In many public agencies there is a constant struggle over "organizational identities, goals, and practices" (pp. S47-S48) due to the competing demands of multiple stakeholders and the internal conflict over the agency's agenda (p. S49). Huzzard and Ostergren defines such organizations as "political" in which "actors hold a diversity of conceptions about what the organization is, its purpose, what are considered to be 'good' organizational outcomes and how such outcomes should be reached" (p. S48). The different internal and external groups only give support for the political organization if they believe their own goals will be supported. Thus, units often act unilaterally and there is a great deal of mistrust and skepticism in a political organization (p. S49). A key feature of the political organization is "hypocrisy" by which the leadership is inconsistent in its messages, decisions, and actions. Leaders will say one thing but then take actions contrary to their words in an attempt to maintain a balance between competing groups inside and outside of the organization (p. S49). Because a successful change effort rests upon a widely accepted shared vision that is communicated by a trustworthy and credible change agent, it is apparent why political organizations do not have successful transformational change efforts.

One constraint that is often invoked when attempting to explain why change does not work in public agencies is that the members of the organization do not want change. Recent research has questioned the validity of this argument. Miller et al. (1994) have established that an openness to change is a "necessary, initial condition for successful planned change" (p. 60). This openness to change is widespread in the front lines of many public agencies according to Kelman (2005). In his research, Kelman discovered that many front line employees were "dissatisfied with the traditional system and desired change before any effort at change was initiated." He titled this group "the change vanguard" (p. 39). All that is needed to activate the change vanguard is a signal from the top that the agency leadership would support the change (p. 89).

This theme relates to all three research questions because it relates the general change concepts to the specific environment of public agencies. This is important in understanding how the research questions relate to the case study because of the differences in the change process for public agencies as compared to the change processes that are usually described in the literature.

Part Two: Theoretical Concepts Relevant to the Theoretical Basis for the Case Study

The following concepts—vision, communication, mental models, and team

cognition—are explained in detail to understand better how the research questions relate
to each other and to the case studies,. This will aid in understanding how the interactions
between vision, communication, mental models, and team cognitions influences the

overall change process.

Concept One: Vision

There are many definitions for vision in the change management literature because vision is a key element of change. Gill (2003) defines vision as "a desired future state" and argues that creating vision is the primary duty of a leader (p. 312; see also Harai, 1995, p. 26; Kolzow, 1999, p. 5). Manus (1992) defines vision as a "realistic, credible, attractive future for your organization" in his book on visionary leadership (p. 8) while Levin (2000) describes visions as stories about the future of the organization (p. 95). There are many more definitions but, for purposes of this dissertation, Nutt and Backoff's (1997) definition of a change vision as a mental model of the future will suffice (p. 312). Manus also agrees that vision is a mental model and further argues that it is unique in that it is the "only form of mental model that people and organizations can bring into being through their commitment and actions, and therein lies its usefulness and power" (p. 27). According to him, the power of the vision is that it grabs the attention of people inside and outside of the organization and provides a sense of direction toward a common dream (p. 16).

As with the definition of vision, there are many ideas on the components, properties, and characteristics of a vision. Collins and Porras (1991) write that the two components of a vision are its "guiding philosophy" and "tangible image" (p. 33) while Nutt and Backoff (1997) give four properties of a vision: compelling imagery, taps peoples' energy, provides enthusiasm, and connects to activities of change (p. 309). Kotter (1996) lists five characteristics of effective vision (p. 72) which are essentially the same as the seven properties that Manus (1992) lists (pp. 28-29). The common themes in

all of these are that the vision is desirable, focused, attainable, and well communicated.

Kolzow (1999) adds to the list with his imperative that visions must have values that give people an ethical framework in which to guide them during the organizational change (p. 8)

The reason that there is so much emphasis on vision in organizational change is that it is the first step in the change effort and that it drives the change effort (Chin, Pun, Ho, & Lau, 2002, p. 371). According to Manus (1992), the best visions offer a utopian view of the future (p. 27) and provide signposts for reaching the new future (p. 9). "There is no more powerful engine driving an organization toward excellence and long-range success than an attractive, worthwhile, and achievable vision of the future, widely shared" (p. 3). Done successfully, the right vision will energize workers, create meaning, establish a standard of excellence, and bridge the gap between the status quo and the desired state (pp. 16-17).

In creating a vision, the change agent must gather information about their organization's current state so that they can find areas of improvement (Locke et al., 1991, p. 53). They must process that information and conceptualize the vision. "Visiting the future and recording the experience," as Levin (2000) describes the process (p. 98). Once the change agent has created the vision, they communicate the vision in stories and in statements (Locke et al., 1991, pp. 51-52). In communicating a vision for change, the change agent is giving the employees a blueprint to construct their own mental model of the change vision.

It is the change agent's role to create the change vision according to Gill (2003) because that is the chief duty of a leader (p. 309). Manus (1992) and Locke et al. (1991) also support the premise that the primary duty of a leader is to be the change agent in their organization. The leader is thus the one who provides the vision for the change (Locke et al., 1991, p. 49; see also Farmer, Slater, & Wright, 1998, p. 219). Nevertheless, it is not enough to create the vision; the leader must also be able to share the vision and motivate others to follow it (Denton, 1997, p. 35; Harai, 1995, p. 27; Kolzow, 1999, p. 6; Kotter, 1999, pp.58-60).

According to Kolzow (1999), "building shared vision must be viewed as a core element of the *daily* work of leaders [emphasis in the original]" (p. 6). The leader enables their employees to follow the shared vision along with promoting the shared values inherent in the shared vision (Gill, 2003, p. 313; see also Farmer et al., 1998, p. 220). A good vision is the foundation for decision-making (Harai, 1995, p. 26) and thus it is vital that the employees are well informed about the shared vision (Gill, 2003, p. 314). According to Harai, the better-informed members are about the vision, the more likely they will support the shared vision for change (p. 232).

Before discussing how shared visions are created and how they are communicated, it is important to discuss concepts that may be mistaken for visions.

Manus (1992) lists six characteristics that a vision is not:

- 1. "It is not a prophecy."
- 2. "A vision is not a mission."
- 3. "A vision is not factual."

- 4. "A vision cannot be true or false."
- 5. "A vision is not or at least should not be static, enunciated once for all time."
- 6. "A vision is not a constraint on actions, except for those inconsistent with the vision." (Manus, 1992, pp. 31-32; see also Westley, 1992)

Visions are often confused with plans and planning but the major difference is that plans contain concrete actions that implement the vision (Kolzow, 1999, p. 6). As explained by Kotter (1999), planning is a "management process" which is designed to produce "orderly results" while visioning sets the direction for change (p. 55). This does not mean that visions are mere slogans either (Kolzow, 1999, p. 5). Visions can be compared to strategy but visions have a focus on the future rather than just the current reality (Nutt & Backoff, 1997, p. 312). Visions are often confused with missions (Collins & Porras, 1991, pp. 42-43); goals and objectives (Nutt & Backoff, 1997, p. 309); and core values/guiding philosophy (Collins & Porras, 1991, pp. 34-35) but these constructs flow from the creation of a shared vision and are the enablers of that vision.

Senge (1990) writes that a shared vision is more than just an idea. A shared vision is a powerful motivator that answers questions about the future that people want to create. It reflects the personal visions of the people and focuses their energy and learning. People are connected to vision along with being connected to each other (p. 206). This is why shared visions cannot be forced but must "foster genuine commitment and enrollment rather than compliance" (p. 9). The success of a shared vision depends on the strength of an organization's informal networks (Kotter, 1999, pp. 61-62) which in turn depend on a healthy sense of trust in the organization (Kolzow, 1999, p. 6). Kotter (1996) also stresses

the importance of teamwork and the need for trust in his description of the process for creating effective visions (p. 81). Nutt and Backoff (1997) assert that improvements in organizational performance can be traced to visions that "offer innovative views of the future," are clearly articulated, provided a means for implementing the vision, and are rooted in the values of the organization (pp. 312-320). To create such visions requires the joint efforts of the change agent and the members in a trusting environment.

Once a vision has been created (either solely by the change agent or in concert with a team of change agents), it now has to be shared with all members of the organization. The purpose of the sharing is not selling the vision but rather have people "enroll" in the vision according to Senge (1990). People must buy into the vision (Harai, 1995, p. 26). This is necessary because motivation is the key to change (Gill, 2003, p. 316). People must be committed to the vision in order for change to occur (Manus, 1992, p. 133).

The key to sharing the vision is communication (Kolzow, 1999, p. 5; see also Armenakis, Harris, & Mossholder, 1993, pp. 686-687). According to Kotter (1996), the elements of successfully communicating a vision are simplicity; metaphor, analogy, and example; multiple forums; repetition; leadership by example; explanation of seeming inconsistencies; and two-way communication (p. 90). If communication can be thought of as the transferring of blueprints for a mental model, then the above elements play an important role in accurately conveying the change vision.

Concept Two: Communication

If there is one thing that organizational change researchers agree upon, it is the importance of communication. As Miller et al. (1994) found, communication was the most vital factor (p. 73) in determining the willingness of people to participate in change. Stewart and Kringas' (2003) also found that communication was of great importance in persuading people to participate in change. Communication is important because it builds good relationships that enhance the organizational climate that in turn leads to a greater acceptance of change (Peterson & Albrecht, 1996, p. 293). Even in negative organizational climates, communication can ameliorate the effects of the negative climate and help in the process of recreating the climate for the better (p. 291).

Arygris (1994) states that employees will act as they think management wants them to behave (p. 84). Without open and good communication, employees will rely on the informal gossip networks that often deliver misleading and negative information (Ellis, 1992, p. 54). That is why it is vital for managers to create good information networks. "Employees who are well-informed about their roles and the goings-on within their organization in the initial stage of change may accumulate more and higher quality information about change than employees without such an information network" (Miller et al., 1994, p. 74). Miller et al. further write that an "open information environment may be management's best ally in facilitating change" (p. 74).

One way that communication aids in organizational change is by creating a state of readiness. Readiness is the precursor to change because it sets the stage for the acceptance or resistance to change. During this state, members form their beliefs about

the need for change and the organization's ability to change (Armenkis, Harris, & Mossholder, 1993, p. 681). In the initial message of change (change vision), the change agent must describe the "discrepancy between the desired end-state (which must be appropriate for the organization) and the present state" and that the organization is capable of change (p. 683). The discrepancy must be clear enough so that the members understand and appreciate the impetus for change and that the desired end-state is preferable to the status quo. Once that is established, the members must be reassured that change is possible and the discrepancy will be eliminated (p. 684).

Communication is also vital in two other ways. For there to be shared goals, the managers and the employees must have "exchange communication" to build understanding (Farmer et al., 1998, p. 233). Exchange communication is especially vital in building the understanding necessary to create a shared vision for change. The second way that communication is vital is that the more complex the goals, the more need for communication. Change efforts usually have several goals and the interplay between the goals can rapidly become complex and confusing. Thus, constant communication is required to strengthen understanding and enthusiasm for change (O'Keefe, 1988, p. 91).

Even though managers and change agents understand the need for communication, they still rely on communication methods based on the command-and-control hierarchical organizations of the past. In today's public agency, it is not enough to just announce changes and expect that the message will be completely understood and acted upon. As Argyris (1994) argues, focus groups, surveys, and similar communication tools will only inhibit communication (p. 77).

Morgan et al. (2002) explains one approach to communicating in a new way. In their book, *Risk Communication: A Mental Models Approach*, the authors give a history of risk communication that demonstrates the problems inherent in the communication styles. Risk communication is communication designed to "supply laypeople with the information they need to make informed independent judgments about risks, safety, and the environment" (p. 4). In the first six stages of risk communication, the risk experts go from just communicating the risk probabilities to telling people how to prepare for the risk (p. 9). In all six stages, there is only unidirectional communication with the assumption that once people fully comprehend the risk they are able to manage successfully a risk event.

It is only in the seventh stage of risk communication that this assumption that unidirectional communication is enough is challenged. Risk communicators in this stage create the risk communication by having the public participate in the co-creation of the risk message. Communication is bi-directional and the message is considered effective when people can accurately communicate back the expert model of the risk (p. 19).

Morgan et al. (2002) advocate "mental model based risk communication" because it fulfills the advantages of the seventh stage of the risk communication. In their research, the authors found that risk communication fails in four ways. It may induce delusions of competence or give irrelevant information that distracts from the essential information. Recipients may not understand the message or may disregard the message if they believe the risk communicators have a personal stake in the risk message. By basing risk communication on mental models, the authors posit that people will naturally build

mental models on any information they receive about the risk so why not take advantage of this naturally occurring process to help people create effective and more accurate risk mental models (p. 21).

The four steps of mental model based risk communication start with the creation of an expert mental model that is considered the desired way to understand and manage a risk. This expert model is then communicated to a pilot audience that then undergoes mental model interviews to determine how closely their mental model fits the expert mental model. After several iterations of the above two steps, the mental model is then communicated to its intended audience and their feedback is evaluated to determine the continuing success of the model (Morgan et al., 2002, pp. 20-21).

The research for this dissertation uses the Morgan et al. research design and adds the theory of message design logic to analyze the communication used by the change agent. In message design logic theory, it is a fundamental assumption that people have needs that lead to motives that are expressed as goals. "Goals are aims for the conversation" and thus people communicate to obtain a goal or goals (Hullman, 2004, p. 209; See also O'Keefe, 1988, p. 82). Persuaders, people who attempt to fulfill their goals, use three different ways to communicate: "being considerate and respectful to the persuadee, maintaining self-respect, and maintaining the interaction" (O'Keefe, 1988, p. 81). Communication can be considered effective when the persuader successfully compels people to accept their goals by using communication suitable to the context (Hullman, 2004, p. 211). The type of message design logic used is dependent on the perception of the speaker's goals. (p. 209). If people do not perceive that the goals are in

conflict then it does not matter which message design logic is used. If the there is a goal conflict the type of message design logic used substantially influences the effectiveness and appropriateness of the communication (p. 210).

The first type of message design logic is *expressive design logic* (EDL). This is the simplest form of message design logic because the speaker only expresses what he or she feels and thinks without consideration to the context and their audience (O'Keefe, 1988, p. 84). EDL messages are very literal, often emotional, and usually incomplete (Hullman, 2004, p. 209). The intent behind the EDL message comes from an immediate reaction in the speaker that caused them to make a mental association leading to the abrupt vocalization of what the speaker was thinking (O'Keefe, 1988, p. 86). EDL messages do not fulfill any goal other than the expression of the speaker's thoughts and reactions (p. 84). EDL does not provide any support to the listener that will reduce uncertainty about a situation and thus are not adequate for expressing change visions (Peterson & Albrecht, 1996, p. 294).

Conventional design logic (CDL) does consider the context as the speaker expresses his or her goals (Hullman, 2004, p. 209). CDL emphasizes the "goals of the speaker and what actions will be taken to accomplish those goals" (p. 210). Under CDL, the persuader treats communication as a game in which there are generally known rules and conventions that must be followed in order to make the communication effective (O'Keefe, 1988, p. 86). The speaker may express their true thoughts and feeling but only in the context of the situation and if it will help in achieving the speaker's goals. A key

drawback to CDL is that it is difficult for the speaker to reframe their message because of his or her focus on achieving the goal (Peterson and Albrecht, 1996, p. 295).

Communication in the third type of message design logic, *rhetorical design logic* (RDL), rests on the premise that "communication is the creation and negotiation of social selves and situations" (p. O'Keefe, 1988, p. 87). The speaker attempts to align their goals with the goals of their audience. "Rhetorical messages reflect a person's awareness and ability to address his or her own goals while recognizing the receiver's goals simultaneously" (Hullman, 2004, p. 210). RDL speakers use proactive messages and the messages are designed toward achieving effects rather just responding to another's message as in the case of the first two message design logics (O'Keefe, 1988, p. 88). RDL is the most elaborate way to construct messages because the communication is most effective when mutual consensus is achieved (Peterson and Albrecht, 1996, p. 295; see also O'Keefe, 1988, p. 85).

It has been established that in most cases, RDL is the best method for creating context through the coordination and negotiation of the speakers. RDL speakers work to create meaning which is mutually shared and understood by all participants (O'Keefe, 1988, pp. 87-88). CDL and EDL speakers who are surrounded by RDL speakers often adopt the RDL style (p. 89) because RDL messages are perceived as a more effective way to control others through the process of goal alignment (Hullman, 2004, p. 210).

A contrary finding to the view that RDL is the best message design logic comes from Peterson and Albrecht's (1996) research. They found that the quality of understanding between a superior and subordinate is less when both use RDL in their

communications. Peterson and Albrecht suggest that both sides are attempting to overanalyze the intent behind the messages and thus may perceive each other's motives negatively (pp. 304-305). They found that the most effective message design logic pairing is when the superior communicates RDL messages while the subordinate uses EDL or CDL. This finding has some interesting implications on just how a change agent should communicate with the members of an organization.

Concept Three: Mental Models

Mental models have been alternately defined as "the brain processes we use to make sense of the world" (Wind & Crook, 2005, p. xlvii); "adaptive belief constructs used to describe, explain, and predict situations" (Burns, 2005, p. 17); "a symbolic representation of a system and its expected behavior" (Druskat & Pescosolido, 2002, p. 285); or "deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the work and how we take action" (Senge, 1990, p. 8).

Mental models have been referred to as schemas, frames, or beliefs systems but the common element of all these definitions is that they refer to cognitive structures in which a person interprets new information based on their mental construction of reality (Reger et al., 1994, p. 568). Mental models have a profound impact on people's relationships with others and their proficiency in their daily lives (Wind & Crook, 2005, p. lii).

As implied in the definitions, mental models are formed by peoples' perceptions of the world around them. Each person takes in information through their senses but discards most of the sensory data. What is left is used to create an internally consistent

"parallel world" of reality (Wind & Crook, 2005, p. 9; see also Johnson-Laird, 1983, p. 406). "Reality is a story that the brain and world come up with together"—the Cartesian theater in which people believe they are seeing reality projected into their mind when what they are actually acting upon is the mental model of reality (pp. 243-245). This is important to note because this is why people have varying interpretations of the same situation. As a situation evolves, people continually construct mental models to "describe, explain, and predict" the events so that they can deal with the changing reality (Burns, 2005, p. 17). These mental models vary from person-to-person despite the models being constructed through common neurological means (Wind & Crook, 2005, p. 242).

The different ways people gather, process, and evaluate information is called *cognitive style* and it is this which greatly influences the construction and evolution of mental models (Hayes & Allinson, 1998, p. 850). People who are detail-oriented and prefer "hard facts" will create different mental models than people who prefer "soft data" and base their decisions on intuition (p. 857). Organizations tend to have a *cognitive climate* that is "the collective preferred [cognitive] styles of the group's majority clustered around its mode or mean" (p. 858). Each individual in an organization has their own mental models but individuals also share a collective mental model with their immediate groups and organization. Mental models are shaped through education, training, influences by friends and coworkers, personal experiences, and rewards/incentives (Wind & Crook, 2005, pp. 12-13). Thus, even though mental models are personal mental constructs, their development depends on the interactions with others.

Mental models tend to persist even though they may no longer be useful (Wind & Crook, 2005, p. 26). Mental models are fundamental to human reasoning because they allow people to predict the behavior of others (p. 244) and allow people to understand concepts in their world (Johnson-Laird, 1983, p. 2). This fundamental need compels people to cling to their old mental models even though the models no longer accurately reflect reality. This is an important realization because much of human communication is the sharing of "blueprints" for creating mental models in others (p. 5). Unless a person realizes that their mental model is flawed, they can cause great damage to an organizational change effort by communicating bad mental models of the proposed change.

Hayes and Allinson (1998) warn against the danger of communicating bad mental models when they describe how a group of "like-minded people" can create a mental model that limits diverse thinking and encourages stereotypical thinking (p. 867). Hayes and Allinson describe how the quality of the shared mental model is dependent upon individuals constantly improving their personal mental models (p. 856). Mental models do not have to be accurate (Johnson-Laird, 1983, p. 3) but they must be "identical to the structures of the states of affairs, whether perceived or conceived, that the models represent" (p. 419). Mental models based solely on perceptions usually do not have the problem of being structurally identical but, mental models based on discourse are often more susceptible to being flawed. As Johnson-Laird explains, discourse-based mental models can be about "fictitious or imaginary worlds" and thus have no structural identity as they would if they perceptually based (p. 407). Being able to recognize the uncertainty

inherent in discourse-based mental models will aid the change agent in creating effective change visions.

In recognizing the power of mental models, Wind and Crook (2005) argue that organizational change will only occur when the individual and shared mental models are first changed. Wind and Crook advocate *mental model based change* that consists of understanding the old mental models and developing ways for people to shift to new mental models (pp. 217-222). Old mental models can lead to being left behind during organizational change or increased resistance to change (p. 41-42). This is due to *cognitive lock* in which the person's perceptions become so fixed due to their old mental model that they disregard all information that conflicts with their current mental model. They refuse to consider explanations that are not supported by their model of reality (p. 48). The person only changes their mental model when it is apparent that it no longer works but often that is too late. Wind and Crook advise that early-warning systems should be created that scan for "outliers and just-noticeable differences" as cues that existing mental models may need to be replaced (p. 47-48).

In replacing mental models, Wind and Crook (2005) explain that organizations need to adopt two types of organizational learning. The first type of learning is to "deepen knowledge within an existing mental model" while the second type is to examine the broader world outside of the current mental model and construct a new mental model that makes sense of the new perceived reality (p. 16). Wind and Crook give guidelines for bridging the gap between the old mental model and new mental model (pp. 165-167) and for creating new mental models (pp. 81-89). The common theme to these

guidelines is the use of dialog and shared meaning in the construction of the new mental models.

It is vital that mental models be reexamined on a periodic basis and especially before organizational change. Mental models are formed by repeated exposure to stimuli as people attempt to make sense of their environment. Once the mental model is created, further stimuli are fitted into the mental model—*perceptual confirmation*. Perceptual confirmation is what prevents people from seeing the signals for change (Kelman, 2005, pp. 25-26). Senge (1990) echoes this observation when he explains how people are often unaware of just how much their perception is shaped by their mental models. "The problems with mental models lie not in whether they are right or wrong – by definition, all models are simplifications. The problems with mental models arise when the models are tacit – when they exist below the level of awareness" (p.176). Mental models encourage "leaps of abstraction" (Senge's term for perceptual confirmation) in which people seize upon generalizations without considering the basis for their conclusions (pp. 192-194).

Concept Four: Team Cognition

Teams play a vital role in the work of organizations—especially the difficult and complex tasks. This is because better decisions and safer results will occur from the "added input of multiple individuals" rather than relying on the judgment of a sole individual (Salas & Fiore, 2004, p. 3). Even the output of a workgroup is considered inferior because the contributions of a workgroup are just the sum of individual outputs

while the team includes both individual outputs and a "collective work product" or the "joint, real contribution of team members" (Ashmos & Nathan, 2002, p. 200). According to Parris and Vickers (2005), the use of teams in public administration is on the rise because of the belief that teams are more effective and productive due to communication between team members (p. 227).

This positive perception of teams has been challenged by some studies. Parris and Vickers (2005) conducted an "exploratory and interpretative qualitative study" in which they interviewed team members about their experiences. According to their findings, team members actually felt a sense of unease and discomfort in being on teams. Parris and Vickers attributed these perceptions as a reaction to the rhetoric that teams were good (p. 278). Ashmos and Nathan (2002) cite a 1995 study from the *Economist* that found that 70% of teams do not work and a study from *Fortune* magazine describes how managers and team members find the team experience frustrating and disappointing (p. 198).

One reason for this divergence of opinion on team effectiveness may not lie in the process of teaming but because the teams did not have a clear understanding of the goals they were supposed to accomplish. As Farmer et al. (1998) argue, there is little research on the affects of "institutional agenda setting and the role communication plays in creating this shared reality" (p. 220). As the rest of this section will demonstrate, the reasons why teams fail is more to do with the ineffective shared mental models that prevents teams from learning and affecting organizational change than any inherent flaws in the teambuilding process.

Before discussing the how team members create shared mental models, the vital role of organizational culture must be explained because culture influences the various processes of organizational life such as decision-making, cooperation, control, communication, and perceptions (Chin et al., 2002, p. 368). Culture is the basis for organizational effectiveness and a positive culture enhances all other aspects of the organization. There are many definitions for organizational culture but Chin et al. (2002) and Sackman (1991) give the two most relevant definitions for purposes of this study.

Chin et al., (2002) define organizational culture as a sense of "good and evil" and "normality and abnormality." Culture defines the "boundaries and contours" of the organization while affecting "the interactions of employees." Culture controls the daily organizational life of the organization and "dictates what people do." An organization may have a good infrastructure and work processes but without a good culture, "success cannot be significant and be maintained over the long run" (pp. 366-367).

Sackman's (1991) definition of culture is similar but he expresses it as a shared cognitive map that "contains cognitions about descriptions, operations, prescriptions, and causes" which are used to influence the members' "perception, thinking, feeling, and acting" (p. 34; see also Senge, 1990, p. 35). Taken together, these definitions demonstrate how organizational culture begins with the individual who shares their cognitions with others to create a shared mental model that then influences how the individual member will behave (p. 18; see also Reger et al., 1994, p. 568; Simon, 1991, p.125). This "cognitive perspective" consists of "ideas, concepts, blueprints, beliefs, values, [and] norms" that woven together make up culture (Sackman, 1991, p. 21).

Effective leadership is a function of organizational culture and leaders must first understand the culture of an organization before they attempt to change it (Parry & Proctor-Thompson, 2003, p. 382).

Therefore, organizational culture is the key to change because it determines what people believe and how they are to act. For change to occur, people must adopt a new set of values and beliefs that become embodied in the new culture of the transformed organization (Chin et al., 2002, p. 366). However, organizational culture resists change "because it is so well established and ingrained, and any attempt to change the culture may be a declaration of war on established systems" (p. 367). Thus, it the key to changing the culture is to understand the shared mental models and how these shared mental models were shaped.

Druskat and Pescosolido (2002) argue that shared mental models arise as team members learn how to work together and within the organizational culture (p. 284). Team members start by sharing a sense of ownership in the team's actions and then progress to a shared self-management model (p. 291). Another shared mental model is developed as the team learns to interact within the team while dealing with "individuals outside of the team boundary" (p. 293). Hayes and Allinson (1998) describe a similar process in that shared mental models form and develop as individuals and organizations create beliefs based on their perceptions of reality. These beliefs are then compiled into an *organizational code of received truth* that is both affected by and affects the members of the organization (p. 855; see also Ashmos & Nathan, 2002, p. 213). If members share a similar cognitive style, shared mental models are more easily created (Hayes & Allinson,

1998, p. 848). Shared mental models strengthen their acceptance by being effective in predicting events in the environment (p. 854). McComb, Green, and Compton. (1999) found that there is a positive relationship between team performance and the team's shared mental model (p. 7). Thus, the creation of shared mental models is a natural result of teamwork. Effective teamwork strengthens the shared mental model that leads to an even higher performing team (p. 8).

Once the shared mental model has been created and developed, teams begin to exhibit certain characteristics. First, is an internal set of team goals that result from a "common understanding about the objectives that the team is trying to achieve" (Kline, 2005, p. 175). A second characteristic is a clearly defined team identity while the third characteristic is a set of norms that allows for team self-management (p. 175; see also Druskat and Pescosolido, 2002, p. 285). In Ashmos and Nathan's (2002) view, there are four characteristics of a team's shared mental model: self-empowerment; comfort with conflict; willingness to challenge hierarchies and organizational belief systems; and the ability to shape organizational strategy (pp. 209-212). In either case, the team's shared mental model allows the team members to define their identity from the rest of the organization.

The team's shared mental model serves as the foundation for a situational shared mental model that is of a more dynamic nature. The situational shared mental model arises because an event occurs in which the team cannot comprehend by comparing it to the team's shared mental model. The team members suggest alternative courses of action until they reach an intuitive consensus on how to respond to the event (Kline, 2005, p.

179). Situational shared mental models most likely occur around organizational transformation efforts because the change challenges the team's shared mental model.

Thus, the team must respond by creating a situational shared mental model to cope with the change.

To measure how closely the team members' schemas correspond with each other, Rentsch and Woehr (2004) discuss three different measures. The first is the *team member schema similarity* that measures how closely the individual schemas come together in a shared mental model. The second measure is the *team member schema congruency* that details the match between the individual schemas in content and/or structure. The third measure is the *team member schema accuracy* that measures how close the team's shared mental model is to a "true score" (pp. 14-15). These measures are used to measure different characteristics based on "the team's task. . .teamwork. . .or general personality characteristics, because these appear most likely to be related to team functioning" (p. 17).

Not all shared mental models lead to effective team performance. Research has shown that performance is based on the team's shared mental model and that teams often fail because of restrictive mental models that limit their ability to react to their environment (Ashmos & Nathan, 2002, pp. 198-200). A common shared mental model is the command-and-control model in which goals are clearly stated, roles are rigidly defined, and actions are predictable (p. 201). As Ashmos and Nathan posit, the command-and-control model may have been appropriate in the past but, in the modern

public agency, this shared mental model greatly restricts the ability of the team to cope with complexity and uncertainty (p. 199).

Teams are how organizations learn. Organizations learn either by the aggregation of what the members are learning or by bringing in new members who have new knowledge. Either way, the organization is dependent upon individuals for its knowledge (Simon, 1991, p. 125). It is with individuals that knowledge begins. First, there is tacit knowledge that is the knowledge that exists inside the individual's mind. When tacit knowledge is communicated and encoded, it becomes explicit knowledge. Cultural knowledge is the third form and it arises because of shared mental models (Choo, 1998, pp. 111-112). In the four modes of knowledge conversion (socialization, externalization, combination, and internalization), tacit knowledge and explicit knowledge are converted into each other while cultural knowledge draws from both (p. 8). Even though learning begins with the individual, teams are vital to organizational learning because the knowledge conversion modes depend on the dialog and interactions between team members (Senge, 1990, p. 10) as they establish a team identity (Huzzard & Ostergren, 2002, p. S57) and make sense of the organization and its environment (Ashmos & Nathan, 2002, p. 203).

It is their role as agents of learning for the organization that makes teams so vital for organizational change. "Teams can be sensors and change agents that can vitalize an organization. They are capable of shaking an organization from a sluggishness that results from years of routine and unquestioning acceptance of top-level decisions" (Ashmos & Nathan, 2002, p. 209). Even so, shared mental models can inhibit change

because the past successes of the team's shared mental model dissuades the team from exploring uncertain options when they have the surety of an established mental model (Hayes & Allinson, 1998, p. 861).

Along with the individual mental models and the shared mental models of the teams, organizations also have a collective memory. Collective memory is a mental model that "is sustained over time despite changes in organizational membership" and is a combination of mental models and the knowledge that is "stored in files, procedural manuals, routines, traditions, and conventions" (Hayes & Allinson, 1998, p. 856). This collective memory still operates through teams, which causes a "communication overhead" as they share information in pursuit of the goals of the team and team performance (MacMillian, Entin, & Serfaty, 2004, p. 61).

Sackman (1991) refers to this collective memory created by teams as *cognitive* maps. Five components comprise the cognitive map. The first component is *descriptive* in that the component defines and describes phenomena. The second component is *dictionary knowledge* that represents the phenomena in lexical terms. *Causal-analytical attribution*, the third component, refers to the causal relationships between parts of the phenomena. The fourth and fifth components are closely related in nature. *Directory knowledge* is "how-to" knowledge while *recipe knowledge* is "prescriptive recommendations based on collective experiences and judgments" (pp. 35-37). The cognitive map requires a great of communication to create and maintain.

Summary

The first part of the literature review demonstrates the complexity of organizational change and the various components that are involved in the change process. Change is a constant in organizations whether they are in the public sector or private sector and there is no universal change process (although there are common parts to the change process). Leadership is vital to the change process and, as many change theorists contend, the most important task of the change leader is the creation and communication of the change vision. Although there is some dispute over the assumption that people are naturally resistant to change, the literature does show that failed change efforts can have severe psychological and physiological impact. Thus, this part of the literature review justifies the significance of this study because of the substantial role change plays in public organizations.

The second part of the literature review is describes the various concepts that make up the research questions and hypotheses. The vision subsection defines vision and the diverse ways vision can be created. The communication subsection details the role communication plays in the organization and introduces O'Keefe's (1988) theory of message design logic that will be used to analyze how change agents communicate the vision. The concept of mental models was defined in the third subsection while team cognition (and the associated concept of culture) was explained in the fourth subsection. Taken together, these concepts point toward a relationship that suggests the research questions on how the change vision (itself a mental model) can influence members of the organization to discard their current mental models in favor of the change vision.

Thus, having established the theoretical basis for the study, the third chapter describes the research design. Using the case study methodology, primary and secondary documentary material relevant to the communication of the change vision was collected. Qualitative interviews of the change agent and participants in the change vision were also conducted. From this data, mental models of the change vision were extracted and coded. and documentary material was collected to determine how the various communication methods affected the change vision alignment.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

Method of Inquiry

A case study methodology was used as the method of inquiry. A major purpose of this study is to produce empirical data to support a descriptive theory of the role communication plays in change vision alignment. It is difficult to separate out this phenomenon from the context of the public agency and thus an experimental or quasi-experimental method would be difficult to perform and would not give rich data. A phenomenological study has been ruled out because this could produce too much data and thus make the data analysis too complex. By using a theoretical construct created out of the combination of message design logic theory and mental models theory, the data collection was better guided and the analysis did produce a testable theory – the "compensating change vision effect" (Yin, 2003, p. 14; Eisenhardt, 1989, p. 547). Another advantage to this particular research design is that it has already been tested (in a modified form) by Morgan et al.'s (2002) research.

Because the research examines multiple levels from the individual to teams to the organization as a whole, the case study methodology is well suited for research situations in which the units of analysis change during the research (Yin, 2003, p. 1). Case study research is best used to explore "how" and "why" questions (p. 6) and in situations where the investigator is studying a "contemporary set of events over which the investigator has little or no control" (p. 9). The case study method has a number of data collection methods and data analysis methods for a researcher to choose from such as "archives, interviews, questionnaires, and observations" (Eisenhardt, 1989, p. 534). Some

researchers would argue that there are too many data collection methods and data analysis methods but other researchers find this flexibility to be an advantage when using the case study method (Verschuren, 2003, p. 121).

In this research design, there were three major data collection methods. The first method was a special form of qualitative interviewing to extract out the mental models. That will be discussed in the data analysis section but it will be useful to describe in general what a qualitative interview is.

The qualitative interview is much like a normal conversation in that the interviewer carefully listens to each answer and then asks the next question based on the previous answer. The questions and answers follow in a logical pattern as the interviewer and interviewee take turns asking and answering questions (Rubin and Rubin, 2005, p. 12). "The purpose of [qualitative] interviews . . . is to find out what happened, why, and what it means more broadly" (p. 6). Unlike quantitative interviews, researchers strive for "depth, detail, and richness" in the interview and thus they use a combination of "questions, probes, and follow-ups" (p. 13).

The second data collection method was the collection of secondary source material about the organizational change while the third method was the collection of primary source material relevant to the communication of the change vision. This data was managed using NVivo 8 and the mental models analysis was performed using Automap.

There was only one investigator for this study. The obvious disadvantage to this was that it took some time to complete all of the interviews but the advantage was that

the data collection and analysis was consistent. Another advantage was the investigator's familiarity with the theories behind the case study. Thus, the investigator could better decide what data to concentrate on and what data to exclude. To guard against questions of bias, detailed research logs and interview transcripts were kept in the NVivo 8 software. The interview transcripts, mental model analysis, and internal communication documents are attached as Appendixes B through S for reference.

Selection of the Case Study

A local government agency (Louisville Metro Archives) was chosen for the case study. This agency was chosen because it was the result of the merger between two existing agencies from different levels of government. This was a substantial change project because it had a major impact on the operations and management of the two former agencies. This event clearly meets the criteria for a change project because the change had to affect more than one department in the agency and substantially alter the work functions for the affected participants.

Data Collection

Five employees of the Louisville Metro Archives were interviewed. One employee was identified as the primary change agent and thus their mental model was identified as Mental Model 0. Five interviews are sufficient for a qualitative case study (Yin, 2003, p. 51; see also Verschuren, 2003, pp. 136-137). The identity of the interviewees was kept confidential by deleting any references to personal identifying

information in the audio recordings. To ensure that the participants were ethically treated, the list of interview questions was be submitted to the Walden University Institutional Review Board along with documentation that described how the data would be collected, coded, and stored so as to protect the participants' identity. Walden University's Institutional Review Board approved the research design on May 14, 2008 and assigned approval number 05-14-08-0221217 to this study.

In preparation for the interviews, the investigator drew upon his experience in interviewing as a paralegal for both a public defender's office and as an investigative paralegal. The investigator conducted close to 100 initial client interviews for the public defender's office and over 100 interviews as an investigate paralegal for the Kentucky Natural Resources and Environmental Protection Cabinet. For this research, the investigator consulted with a senior colleague who is a psychologist well versed in numerous interviewing techniques. The investigator also practiced with colleagues on conducting mental model interviews in order to develop the skills necessary to perform the field research.

The interview data was used in the network text analysis to extract the participants' mental models. The primary documents were the change project documentation created by the change agent and internal documents used to communicate the change vision. The secondary documents were news reports about the merger of the city and county governments.

A large portion of the data consisted of recorded interviews that centered on three major themes: what the participant's mental model of the change vision is; their feelings

about the change vision; and their perception of their role and the role of their immediate team in the agency. The interviews were conducted as mental model interviews for the first part and then as a traditional interview for questions concerning the communications about the change vision. The questions for the mental model interviews are in appendix A, the interview transcripts are contained in appendixes B through J, and the extracted mental models are described in appendixes L through P.

The following techniques for extracting mental models rest upon five assumptions. The first assumption is that "mental models are internal representations" (Carley & Palmquist, 1992, p. 602). The second assumption is that mental models can be represented linguistically which leads to the third assumption that the mental model can be represented as a "network of concepts" (p. 602). The meaning of a particular concept is through its relation to the other concepts is the fourth assumption while the fifth assumption is that the "social meaning of a concept is not defined in a universal sense but rather through the intersection of individuals' mental models" (p. 602).

This study used the same method as Morgan et al. (2002) did in their research on mental models and risk communication. They used an open-ended interview procedure that begins with a carefully planned general question. This first question and follow-up questions are designed to elicit the subject's mental models about a topic without inadvertently communicating the researcher's perceptions or conclusions (pp. 23-24). The investigator's goal was to have the subjects talk as much as possible about their mental model using their own terms and concepts (p. 63). The follow-up questions were designed to keep the subject talking while systematically exploring topics mentioned by

the subject—the "funnel design" (pp. 64-65). The challenge to mental model interviews is for the interviewer to keep focused on the participants' responses while not suggesting answers or prejudging responses (pp. 70-73). In this particular study, the researcher conducted the first part of the interviews by turning away from the subject and asking the questions so that the subject could not see the interviewer's face. This was to prevent the subject from trying to read the researcher's reactions to the answers. The second part of the interviews were conducted face-to-face.

Data Analysis

The data analysis was conducted in two different but parallel processes. The first portion of the data analysis was the collection of written documentation that was analyzed using the method that O'Keefe (1988) uses for analyzing message design logic communication. At or near the same time, the interviews were conducted and then transcribed. Automap, using the semantic network text analysis settings, was used to analyze the transcripts.

The first method of data analysis was to use O'Keefe's (1988) three message design logic structures to code the primary documents and secondary documents by their content and goal intent. Messages in expressive design logic can be grouped into three different types. The first is the "minimal expressive design" which is a message that contains "few elements and the elements they contain are strongly affectively toned or lack any connection to the immediate situation or task" (p. 100). "Unifunctional expressive designs" are statements that are "straightforward expressions [which have]

directly face-threatening content, pragmatically pointless content, an overall lack of objective coherence, and no positive steps taken to deal with the problem presented in the situation" (p. 100). "Multifunctional expressive designs" are like the unifunctional expressive design but "lack the abusive content and negative affective tone found in the other Expressive messages" (p. 101).

Conventional Design Logic messages are organized to gain a particular response and thus the context is considered when the message is communicated. "Minimal conventional design" messages contain elements that are "irrelevant, inappropriate, or dysfunctional from the standpoint of Conventional logic" (O'Keefe, 1988, p. 101). These elements can be "violations of the maxims of cooperation" or "performance of actions that do not require any particular sort of response from the message target" (p. 101). "Unifunctional conventional design" messages "contain at least a minimal attempt to solve the regulative problem, reflected in some core speech act performed in a direct or conventionally indirect manner" (pp. 101-102). "Multifunctional conventional design" messages "employ conventional politeness strategies" that indicate different perspectives on the matter (p. 102).

Rhetorical Design Logic messages contain "explicit contextualizing elements," "resolutions of conflicts in goals by verbally negotiating reorganized social arrangements," "effort to alter situations by altering psychological content," and "flexibility in defining goals and tasks" (O'Keefe, 1988, p. 102). "Rhetorically generated messages display a focus on cooperatively reached goals and belief in equifinality" (p. 102). "Minimal rhetorical designs" have elements that are "vague, incoherent, irrelevant,

and dysfunctional" by Rhetorical Design Logic (p. 102). These elements can be "threats, denigration of the message receiver, or pointless complaints" and "fail to make the message producer's goals clear or which fail to give clear direction to the message receiver" (p. 102). "Unifunctional rhetorical designs employ rational persuasion, altercasting, or procedural negotiation to address the regulative task" (p. 102). The only thing lacking is the message elements to "induce the recipient to accept [the] redescription" (p. 103). The "Multifunctional rhetorical design" message is the highest form of Message Design Logic.

The message is not merely polite; it conveys that the goals of the message target are at least equal in importance to the goals of the message producer, and that the beliefs of the message target are at least equal in probity to the beliefs of the message producer. (O'Keefe, 1988, p. 103)

The second form of data analysis was used for the mental model interviews. After the interviews were completed and transcribed, textual analysis was used to extract and represent mental models. Using Automap, concepts were identified and the relationships between the concepts were calculated. After the concepts and relationships were coded into Automap, the mental models were analyzed graphically and statistically (Carley & Palmquist, 1992, p. 604). The Carley and Palmquist representation scheme was used to analyze the mental models. The scheme consists of four basic objects to display the extracted mental model. The first object is the "concept" which is a "single idea totally bereft of meaning except as it is connected to other concepts" (p. 607). The second object is the "relationship" which ties two concepts together and denote "directionality, strength, sign, and meaning" (p. 607). The third object is the "statement" which is "two concepts

and the relationship between them" (p. 608). The final object, the "map," is a network of statements that represents the extracted mental model (p. 608). This method can be used for written documents as well as interview transcripts (p. 615). Team mental model maps can also be created through the combination of individual mental model maps (Carley, 1997).

According to Carley and Palmquist (1992), this method is superior to three other widely used textual analysis methods. The first is content analysis in which Carley and Palmquist argue that this method does not represent relationships between the concepts (p. 605). The second method, procedural mapping, is more suited for understanding the tasks of an organization rather than how individuals perceive their organization (p. 605). Cognitive mapping, the third method, comes closest to the process described above but the many methods of cognitive mapping lacks automation, lacks ways to compare individual responses, and brings up questions of what is being represented (p. 606).

Establishing Validity

Whether a reductionist research method is used or the case study method is used, the same standard for research quality is still the same. "Intersubjective agreement is a paramount quality criterion in modern social science" (Verschuren, 2003, p. 127). To fulfill intersubjective agreement, the research design must demonstrate "controllability, researcher-independence, internal validity, and external validity" (p. 127). Unlike quantitative research designs, "case study research designs have not been codified" but the researcher can still design the case study to fulfill the requirements of intersubjective

agreement (Yin, 2003, p. 20). The next two ections on internal validity and external validity describes how the study fulfilled the requirements for intersubjective agreement.

Internal Validity

One advantage of case study research is that it is possible to mix qualitative and quantitative research methods to benefit from the strengths of both approaches (Eisenhardt, 1989, p. 538). To realize these advantages, three principles of data collection must be followed. The first is to use "multiple sources of evidence" (Yin, 2003, p. 97). The second principle is to create a "case study database to increase reliability" (Verschuren, 2003, p. 131) and the third principle is to establish a "chain of evidence" when collecting data (Yin, 2003, p. 105).

In this study, data was collected from three sources. The first is the secondary source data that were the news reports and third-party observations of the organizational changes. The second source was the primary documents that are relevant to the change project and the communication of the change vision. The third source of data was the transcripts of the qualitative interviews. Even though the secondary and primary documentation were coded differently from the interviews, they can be used to triangulate data and conclusions in the interviews thus reducing the chance of observer bias, collection errors, and other diminishing factors (Verschuren, 2003, p. 131). Because all of the data was analyzed using the same pieces of software, it was possible to recode the data in either the message design logic content analysis or the mental model analysis for cross-comparisons.

NVivo 8 served as the primary case study database and analysis tool. This, along with a research journal and documentation files, fulfilled the second principle of data collection. This study had a set of formal procedures for collecting and recording data because case studies often involve overlapping and continuous data collection and data analysis (Eisenhardt, 1989, pp. 539-541). These procedures also fulfilled the third principle of data collection that is to provide a chain of evidence for the collected data (Yin, 2003, p. 105).

External Validity

In answering criticisms about the external validity of the findings of case study research, Verschuren (2003) writes that "controllability and researcher-independence are primarily regulative ideas and may thus be used as criteria for judging the researcher and the research results, rather than assessing a research strategy" (p. 134). If the researcher clearly establishes the literature review behind the emergent theory, sets strong boundaries for their cases, documents their research design, and uses multiple case studies, then he or she has answered the requirements of external validity.

Multiple methods for collecting and analyzing data were conducted, an extensive literature review clearly established the theoretical guidance for the case studies, and the research design was well documented. The research design has the added advantage of being a tested research design as it is a modification of Morgan et al.'s (2002) validated and established research design. The subject of the case study was limited to a local government agency that has undergone a major transformation effort and thus the

boundaries of the case are clear and strongly established. This study clearly meets the requirements for external validity.

Summary

This chapter described how the Morgan et al. (2002) research design was modified for purposes of this study. A case study methodology was used because it provided flexibility in the choice of research methods. In addition, the case study is a good method for the initial exploration of the possible relationships between change visions, communication and organizational alignment. Three types of data were collected and two types of content analysis were used to examine the data. This section also addressed issues concerning internal validity and external validity by outlining the steps the researcher took to ensure the objectivity and robustness of the research findings.

CHAPTER 4: DATA ANALYSIS

Introduction

The purpose of this chapter is to describe the study results to determine if communicating a change vision more effectively would lead to greater organizational alignment. The literature suggests that communication that is more effective will lead to closer organizational alignment but there is little empirical evidence that supports this belief. A research design was created to measure the change in the employees' mental models after the change vision was communicated to them. The hypothesis is that the measure of similarity between the change vision and the employees' mental model would have a direct relationship bringing about organizational alignment.

After contacting several federal, state, and local agencies, the researcher was able to secure the cooperation of a local government agency that was formed from the merger of a city agency and a county agency. In November 2002, voters agreed to the merger of the Louisville, Kentucky city government and Jefferson county government thus establishing the Greater Metro Louisville government. During the first year, city and county agencies were merged and restructured to begin functioning as part of the metropolitan government. The Louisville Metro Archives was created by splitting the Jefferson County Historical Preservation and Archives and combining the county archives portion of the agency with the City Archives. The Louisville Metro Archives then became a department under the Louisville Metro Technology Services. At the time of the research, the Louisville Metro Archives was in its fifth year of operation. This agency was chosen because the organization had underwent a major structural change

and restructuring of its mission; enough time had elapsed for the full communication of the change vision; and the organizational realignment should have been, if not fully completed, substantially completed.

The Data Gathering Process

A case study research design was chosen for the data gathering and data analysis. There were three components of the data gathering process: content analysis of archival records and public documents, interviews, and the use of computer software (Automap) to extract and compare mental models from the interview transcripts. The researcher used Nvivo 8 to manage and analyze the qualitative data. The data gathered included an eighty-page Brookings Institute study of the proposed merger, field observation notes, over 100 newspaper articles, five interviews, and over twenty pages of internal documents. Because of the potentially sensitive nature of the interviews, measures were taken to protect the identity of the interviewees during the interview process and subsequent transcriptions. To preserve the confidentiality of the interviewees, the actual date of the individual interviews will not be noted but, for purposes of this study, all interviews were conducted between May 27, 2008 and May 30, 2008. To protect the interviewees' identity, a random file number assigned by the digital recorder identifies the individual interviews. Nvivo 8 was used to track and preserve the collected data. The researcher used password-protected computers and secured USB external drives to protect the data. The transcriptionist was required to sign a nondisclosure document and any identifying information was expunged from the interview recordings before being

sent to be transcribed. The data collection began in May 2008 and was fully completed by July 2008.

The data analysis began soon after data collection. The purpose of the data analysis was to answer the following three research questions:

- 1. How effective are the various communication methods in communicating a change vision as measured in the closeness of fit between the individual's mental model of the change vision and the change leader's mental model of the change vision?
- 2. How does the type of communication method, as a category of O'Keefe's (1988) message design logic, affect its ability to persuade the individual to support the change effort as expressed by the change vision?
- 3. Is there a positive alignment between the accurate understanding of change vision and the person's willingness to align their self with the change vision?

The results of the data analysis are arranged in subsections that correspond with the three research questions.

Research Question One—Mental Model Alignment

An early finding from the data analysis is that there appeared to be more than one change vision being communicated about the merger. There was the publicly disseminated change vision about the merger between city government and country government ("external") and the less-detailed change vision that was communicated to

the employees of the two former governments ("internal"). The first indication of there being two change visions came from this interview statement:

Well uhm, of course it was kind of hard to separate you know the uh, way it was being, you know, sold to, to us, us as citizens and the way it was being sold to us as, as employees, in my case I was an employee of the County government. Uhm, uh, my recollection was the uh, our local uh, the Mayor and the county judge at the time uhm, worked very hard to uhm, promote it. Uhm, and generally they uhm, didn't answer every question as I remember but I think they just basically said that uh, the main thing was to assure people that there wouldn't be uh, layoffs. I think that was the main concern of most uh, uh, city and county employees. (Interview 52)

There was also a third vision offered by stakeholders who were concerned about the eventual structure and function of the Metro Archives. Each vision will be described before discussing the analysis of the communication methods to deliver the change visions.

External Change Vision

This change vision was the most complete because it was based on a 2002 Brookings Institute Report. Centered on the value of competitiveness, the report went into detail on how the merger between the city government and county government would result in creating a "quality workforce," "quality economic development," and a "superior quality of life" ("Brookings," 2002). These results would be accomplished by five strategies:

1. Fix the Basics—Improve education and workforce training

- 2. Build on Assets—Create a 24-hour living downtown and superior research university
- 3. Create Quality Neighborhoods—Healthy, attractive neighborhoods
- 4. Invest in Working Families—Self-sufficiency for families
- 5. Influence Metropolitan Growth—Stem runaway decentralization (p. 6)

The external change vision was very detailed and communicated on a consistent basis to the intended audience of voters.

Internal Change Vision

In contrast, the change vision communicated to the city and county employees was not detailed and seemed contradictory to the goals of the external change vision. In the communications leading up to the merger vote, the merger proponents assured government employees there would be no job losses resulting from the merger but this was not true after the merger.

Cuz what they did, well what I always disliked was the Mayor came on the TV before people even voted on merger and said that nobody was going to lose their job because of merger. And I remember seeing that commercial on TV. But once merger passed he just flip flop and then he was saying how basically. I, I could, I could have lived with it if, if they had did this big attrition thing. (Interview 50)

This contradiction stemmed from the implied value in the internal change vision: consolidation.

5) How will you save money in this new government? Saving money is a critical concern since it has been projected that we are going to enter this new government in a deficit position. Short term, I think we have the opportunity to be more cost efficient in the way we conduct the government's business. For example, our aldermen and county commissioners currently have multiple staffers and I think we can see real savings by limiting each council member to one assistant since their constituencies are now smaller. I think we also will see real savings through the consolidation of services, which can increase our economies of scale. We can save money by consolidating the maintenance of all government-owned vehicles, for instance. No matter what, we must be vigilant because we will have to live within the means of what monies we have. ("Merger FAQ," 2002)

Unlike the external change vision, there were no specific strategies on how the

Metro Government transformation was to take place. A consistent theme in the interviews was that employees asked specific questions such as "what's going to happen to us, where are we going to be, what building are we going to be in" but they never received "specific answers to those questions" (Interview 53). When one interviewee was asked if there were formal plans for the structure and operations of the newly formed Metro archives, the interviewee responded, "our formal documents were the budgets" (Interview 47). The budgets had to show that the two groups of employees were combined and that there was a 10% decrease in the budget. Another interviewee responded that when they attended presentations on the merger's effect on the Metro Government employees there were no specific answers. "Uh, we were just told that uh, you know it was all gonna work out" (Interview 53).

In describing the relationship between the external change vision and the internal change vision, one interviewee described a common metaphor used by the Metro Government Mayor:

You know the Mayor liked to tell a story of you know here we were we were all coming together and we were on the top for the public you know we had to show that we were still functioning everything but underneath like a duck we were paddling like hell under water. So he used that analogy a lot and I think that was pretty accurate. (Interview 47)

Third Party Change Vision

Although the third party change vision was not included in the mental model analysis, it is mentioned here because it provides further confirmation of differences between the external change vision and the internal change vision. The third parties consisted of the Kentucky State Archives, the Filson Club (a local historical society), and other patrons of the County Archives and City Archives. As one interviewee described it, the third parties seemed more concerned about the eventual fate of the Metro Archives than the Merger Task Force.

So what was very interesting to me was I was hearing more conversation outside of government about where we should go from people who were interested in seeing that the archives got a good place to be moved to. Uhm, we, we had people just calling us from the outside and saying stuff to us that internally people weren't discussing that with us. So that was kind of strange. That, that you had people from the outside that didn't have even any positions, these people weren't, weren't metro government employees you see what I'm saying. They were people from the outside who were very interested in we even had people from the state archives calling us and discussing well do you know where you're gonna go, do you know where the, where, where all your holdings are gonna be moved to? And we, we, we would always say well no ones informed us of where we're going. (Interview 49)

The third parties did convene a meeting in 2002 in which they developed a change vision for the Metro Archives (see Appendix S). The results of the meeting were submitted to the Merger Task Force but no part of the third party change vision was implemented (Interview 49).

Communication Methods

After determining that there was more than one change vision, the investigator decided to concentrate on the communication methods used to disseminate the internal change vision. In contrast to the external change vision that was more active and seemed to have more engagement possibilities, the communication methods for the internal change vision were top-down with little opportunity for engagement.

The main communication methods for the internal change vision were email, informal meetings, and documents posted to an intranet. According to one interviewee, the agencies were told that they had to work out the specific details for themselves. In the case of the Metro Archives, the employees were instructed to determine everything from office policies to how the employees will be trained.

But in the meantime we started merging, uhm, uh, policies and procedures and most of that was done internally within that group. From our standpoint, from the administration side we pretty much left it up to them to determine uh, how they wanted to do it, uh, what they wanted to do and what uh, what they wanted to look at as they started merging. We just gave them the directive or the understanding that they needed to, to merge those groups. Uhm, merge the, merge the policies, start merging the records, uhm, start understanding, cross training people in each group so that the County people started to understand what the City collection had, the City people started to understand what was in the county collection

and then to start uhm, so that they could both do those jobs uh, if there, if someone was out for the day or if someone left uh, permanently we would be able, we would be covered there. (Interview 46)

The document that is the most detailed communication of the internal change vision is the "Merger FAQ" which was posted to the employee intranet. Question 5 and Question 6 are the most relevant to the questions of how the Metro Government will be structured. Question 5 deals with saving money in the new government while Question 6 answers if there will be fewer employees after the governments have merged. The answers are not specific but do uphold the value of consolidation that seems to be the core of the internal vision ("Merger FAQ," 2002).

In the next subsection, the results of the mental model comparisons are described. Using Automap, portions of the interview transcripts were analyzed to extract mental models of the internal change vision. These mental models were compared to the internal change vision. The assumption is that the closer the fit between a given mental model and the change vision the more effective was the communication of the change vision (Morgan et al., 2002).

Automap Analysis

Automap is a network analysis program that is used to analyze and visualize general networks, social networks, and dynamic networks. It is used to extract and analyze mental models using written communications and interview transcripts. In Appendixes B through J, the transcripts of the interviews are attached for reference. From

those interviews, the portion dealing with the mental models of the change vision were put into a text file for preprocessing through Automap. Preprocessing is a set of procedures to prepare the data for analysis. First, characters other than alphanumeric are deleted from the text. Second, all verbs are "stemmed" which means that the verb forms are transformed into infinitives to more easily compare multiple texts. Third, articles of speech and verbal fillers such as "a," "the," "uhm," etc. are deleted from the text so as not to skew the concepts count and statements count. The delete list is Appendix K.

Appendixes L to P show the mental models before and after preprocessing.

After preprocessing, the mental models are processed using a function in Automap called *CompareMaps*. The processed texts are called maps and a set of statistics are created that measure the number of concepts and statements. Statements are the number of connections between concepts. Table 1 is the results of CompareMaps for Mental Model 0 through Mental Model 4 (Mental Model 0 being the change vision).

Table 1

General Statistics of the Mental Models 0 through 4

Mental Model	Unique Concepts	Total Concepts	Unique Statements	Total Statements	Density Unique	Density Total
0	140	361	300	360	2.14	2.57
1	170	437	379	436	2.23	2.56
2	25	31	30	30	1.2	1.2
3	288	685	604	684	2.10	2.38
4	71	131	119	130	1.68	1.83

The column *Unique Concepts* counts the number of distinct concepts in the mental model while *Total Concepts* counts all of the concepts even if the concepts are repeated. *Unique Statements* is the count of distinct connections between two concepts while *Total Statements* counts all statements in the mental model. *Density Unique* is the ratio of unique statements to unique concepts and *Density Total* is the ratio of total statements to total concepts. Mental Models 0, 1, 3, and 4 have a well-developed structure while Mental Model 2's density indicates a less well-developed structure. To better display the differences in the mental model structures, a graphical model of each mental model was created using a visualization function in Automap.

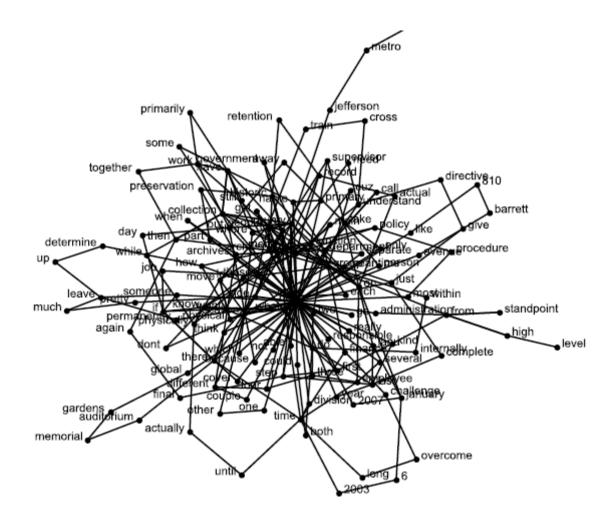


Figure 2. Mental Model 0. The Change Vision.

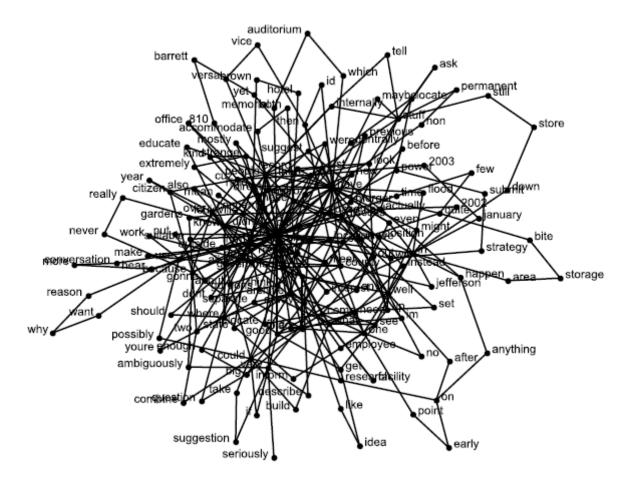


Figure 3. Mental Model 1.

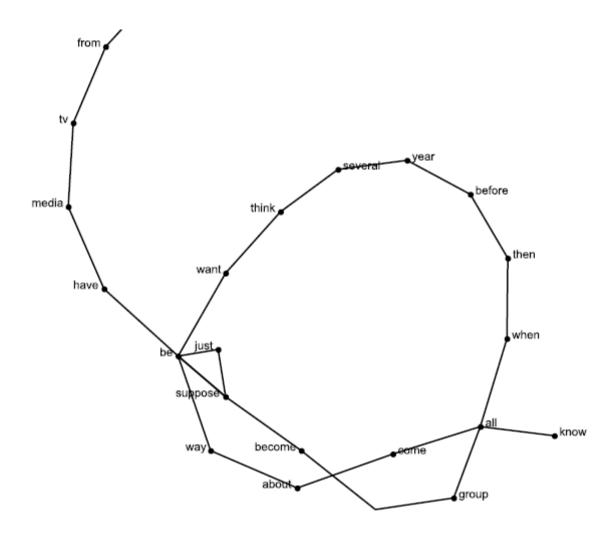


Figure 4. Mental Model 2.

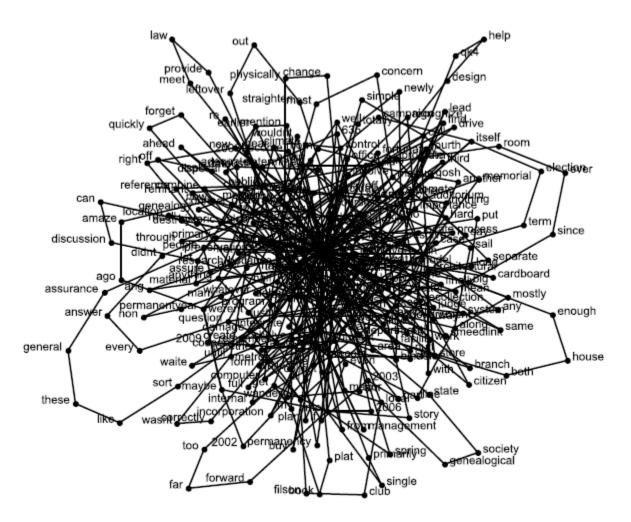


Figure 5. Mental Model 3.

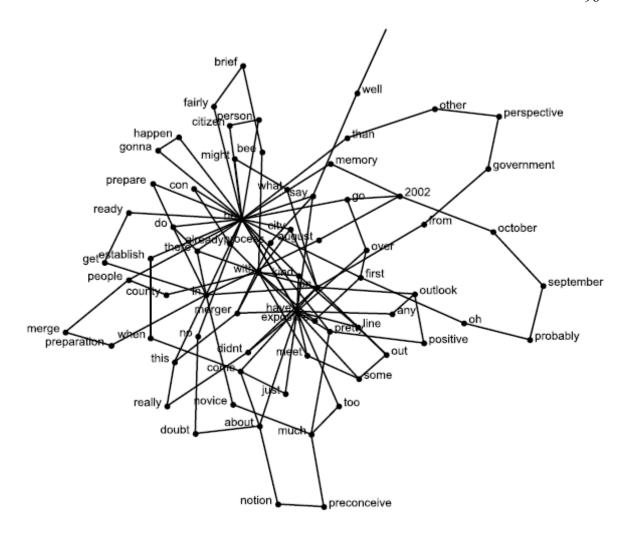


Figure 6. Mental Model 4.

Figures 2, 3, and 5 are graphical proof that Mental Models 0, 1, and 3 are well developed because they are dense with connections between the concepts. Mental Model 2 (Figure 4) demonstrates a less-developed mental model as indicated by the smaller number of connections between the few concepts. This reinforces the researcher's impression of the participant during the interviews as the participant professed to knowing little about the merger (Interview 51). Mental Model 4 (Figure 6) is a good

example of a developing mental model. This participant was hired after the immediate merger of the archives and thus participant's mental model is in the process of creating a more complete representation of the change vision.

The next question is how similar the mental models are to each other. The Automap network analysis statistics indicates that there is very little similarity between the mental models. Table 2 is the result of paired comparisons between the mental models.

Table 2.

Paired Comparisons between Mental Models (MM is "Mental Model")

	Unique Statements	Total Statements	Unique Consensus	Total Consensus	Percentage Unique	Percentage Total
MM0 and MM1	659	796	20	25	3.03%	3.14%
MM0 and MM2	329	390	1	1	0.30%	0.26%
MM0 and MM3	874	1042	28	38	3.20%	3.65%
MM0 and MM4	407	490	12	12	2.95%	2.45%
MM1 and MM2	406	466	3	3	0.74%	0.64%
MM1 and MM3	943	1118	38	46	4.03%	4.11%
MM1 and MM4	486	566	12	15	2.47%	2.65%
MM2 to MM3	629	712	3	3	0.48%	0.42%
MM2 to MM4	148	160	1	1	0.68%	0.63%
MM3 to MM4	709	812	12	12	1.69%	1.48%

Unique Statements and Total Statements are the result of a union between the maps of the mental models while Unique Consensus and Total Consensus are the counts

of similar statements in both mental models. The last two columns are the measures of similarities between the mental models. There is very little agreement between the mental models as indicated by both unique consensus and total consensus. At best, there is a less than four percent similarity between the change agent's mental model and the employee's mental models. What is also interesting is that there is very little similarity between the employee's mental models of the change vision when compared to each other. This validates the conclusions in the literature that poorly communicated change visions can lead to poorly formed and contradictory mental models.

The unstructured nature of problems in complex, multifunctional systems may result in the creation of a large range of mental models. When all actors involved in the problem are not adequately participating into sharing each other mental models early in the problem solution process, the (often implicitly) developed mental models could be insufficient to legitimise [sic] the preferred solution, and incomplete or even incorrect knowledge could have been produced in the project. (Kolkman, M.J., Kok, M., & van der Vee, A., 2005)

To investigate further the lack of similarity between the mental models, a frequency list of unique concepts was created. The top ten concepts out of the total 451 concepts are listed in Table 3.

Table 3.

The Top 10 Concepts in Agreement Between the Mental Models

Rank	Concept	Frequency	Percent of Total Frequency
1	Be	182	11.06%
2	Have	53	3.22%
3	In	32	1.95%
4	People	26	1.58%
5	County	21	1.28%
6	What	21	1.28%
7	Know	20	1.22%
8	Archive	19	1.16%
9	There	19	1.16%
10	On	19	1.16%

After "be," the number of concepts that are similar to even a majority of the mental models quickly falls off to a small fraction of the number of overall concepts. In the cases of key concepts such as "archive," "city," and "county," they are not as frequent or as prevalent in the mental models as would be expected. This is another indication that the undercommunication of the internal change vision led to the contradictory mental models of the change agent's change vision.

The preceding analysis warrants a caveat. The literature review indicates no empirical studies that compare the perceptions of a change vision to the actual change vision. Thus, there is not an established percentage for similarity between mental models that indicates a change vision has been well communicated. It could be possible that a change vision is well communicated and adequate organizational alignment occurs when the mental models agree 30 percent. Alternatively, it could be that the percentage has to be as high as 90 percent for adequate organizational alignment to occur. In the case of the

Metro Archives Merger, the percentage of agreement among the mental models ranged from less than one percent to just over five percent and yet the merger did occur with some success. More case studies need to be performed and more examples of mental model analysis needs to collected before the percentage of agreement between mental models that indicates sufficient organizational alignment has occurred can be established.

Research Question Two—Message Design Logic Analysis

After analyzing the data to extract out the change visions and mental models, the next step was to determine how the change visions were communicated to the employees. This was the second part of the mental model interviews. Along with the interviews, archival sources were also examined to determine the communication methods. The methods of communication from the change agents to the employees were through email, documents posted on an intranet, meetings involving all government employees, and informal oral communication conveyed through supervisors to the employees. Almost all of the communication was down the chain-of-command with very little upward

Message Design Logic Communication Analysis

communication opportunities.

Message design logic (MDL) is a communication theory that assumes that people communicate in order to gain a goal or goals (Hullman, 2004, p. 209). There are three levels of MDL that measures how effective the

communication is in achieving the communicator's goal(s) and if the communication was appropriate to the context and audience. The lowest level of MDL is *expressive* in that the communicator just expresses his or her thoughts without any consideration to the context or audience. The second level of MDL is *conventional* where the communicator does consider context but only engages the audience to the extent necessary to achieve the communicator's goal(s). The highest level of MDL is *rhetorical* where the communicator fully engages the audience in an attempt to align their goals with the communicator's goal(s). The hypothesis for this analysis is that rhetorical MDL is the best way to communicate a change vision. This is based on the assumption that a change vision is effectively communicated when there is an alignment between the change vision and audiences' mental models.

Communication Analysis

Almost all communication concerning the internal change vision was down the chain-of-command. The only upward communication opportunities offered to employees were at the all-employee meetings but the responses to employee questions were "not specific" (Interview 53). The documents that were posted to the intranet also did not contain specifics as the following examples demonstrate:

[Email from Merger Task Force] As we approach January 6,1 know you must be concerned about the inevitable changes ahead. Be assured, my transition team and I have been working diligently to minimize disruptions and provide a smooth transition for all of the employees of our new government. (Appendix Q)

We have spoken with numerous department heads and human resource advisors, and are considering many of the issues we know are important to you. As you know, several differences exist in benefits, holidays and other personnel matters. We will be making decisions on these various issues in the near future.

[Merger FAQ] 6) Will we have fewer employees with a smaller payroll under merged government?

The game plan is to create efficiencies and avoid duplications. On Day One, however, we will have two of everything. You can be sure, however, I will be making proposals to the Council to merge certain departments and explore outsourcing some services. As we approach this new government, we cannot accept anything as a given. We have to take full advantage of every opportunity to figure out how to provide the same or better service with less expense. The goal is that by next fiscal year (July 1, 2003), we will have a budget that will outline the initial areas of consolidation and show how we can be more effective and cost efficient with less money. ("Merger FAQ," 2002)

These communication examples would be considered conventional communications as defined by message design logic. Even though the context of the merger and its effect on the employees is acknowledged, the change agent focused solely on his or her goal of enacting the external change vision. The employees are not encouraged to express their concerns or offer feedback on how the merger will affect their agencies and their jobs.

Some interviewees even expressed the belief that to offer any feedback or reactions to the change agent's communication to invite retaliation or dismissal.

Yeah and basically whenever you heard anything or say you read something that came from the Mayor's office on the, on the computer you always got the feel that keep your mouth shut, do your work, and, and uhm, and maybe, you know maybe you'll be able to keep your job. . . . I know one case in particular where this person had worked for seventeen years and I, and I'm saying well if, if they wasn't a good worker and they

hadn't uh, met the qualifications how could they have, continue to be an employee but then when merger comes all of a sudden bam that person's out the door with, and they got seventeen years and they're just out the door. . . . Sets up fear in people and then they just figure well, well you know I just need to keep my, my, my head to the grindstone, keep my mouth shut because if they'll do that person like that they'll do me like that too. (Interview 50)

A characteristic of the conventional MDL communication by the change agent was the abundant use of clichés when describing the merger to employees during the all-hands employee gatherings. Clichés can be considered conventional communication because they do not invite feedback from the audience and are often vague or ambiguous. During the meetings, employees were encouraged to "think outside the box" and were told that "a new day has dawned" (Interview 53). A cliché can also carry negative connotations as when a deputy mayor expressed an opinion that the Metro Archives was a "low-hanging fruit."

Because one of the Deputy Mayor's made comment that the archives was the low hanging fruit which, what the hell does, does that mean? We're the? And, and, and ever sense then, you know, we, we make this little personal joke in between us that where that day, basically it was just me and XXXX actually, we were at the meeting. And I wonder why, what are low hanging fruit? and so we took it like we were dispensable. You know, because we're not a, we're not a revenue uhm, making. (Interview 46)

There were some examples of "rhetorical" MDL but these were limited to coworkers and to immediate organizational levels. As one supervisor explained, he would meet with the staff of the departments and encourage the staff to come up with their own strategies and solutions to meet the broader goals expressed by the change agents (Interview 47 and Interview 46). The bulk of rhetorical communication was between coworkers as they worked to merge the two former departments into one. "I, well we just talked you know, co-workers talked among each other. But far as taking it any where higher. . . . You know I never did" (Interview 51).

Along with the overt communication from the change agents, there were also examples of indirect communication that seemed to fall under the conventional MDL category. For example, employees had to fill out forms that described their job duties.

And one of the things that I thought was very strange, they had us taking a lot of our time sitting up filling out this damn form that told what uhm, your job was, what, what was the name of your job, the title of your job, what were your job duties, and they, they wanted, they wanted you to, from the time you started in government. (Interview 50)

This task of filling out the form reinforced the fear of the organizational change because soon after the forms were submitted, most employees were demoted (Interview 50)

Persuasiveness of Communication

This research question is difficult to answer because of the vagueness of the internal change vision. As demonstrated in the previous subsection, the communications from the change agents had sparse informational content and thus the persuasive ability essentially is not measurable. There is the implication conveyed in the communication that if the employee did not support the organizational merger he or she would lose their job. Thus, it is difficult to determine if the communication itself was persuasive or if the employees were just complying so they can keep their jobs. The real work of actually implementing the merger was accomplished through conversations between co-workers

so this would indicate that the rhetorical form of communication facilitated the merger of the Metro Archives more than the change agent's conventional communication.

Research Question Three—Change Vision Alignment

One interviewee summed up the internal change vision this way" "you need to merge archives you know good luck." (Interview 47). Essentially this research question could be answered that all interviewees completely understood that they had to merge the County Archives and City Archives into one entity and thus full organizational alignment. The merger was successfully accomplished and from the researcher's perspective, the Metro Archives is functioning well and fulfilling its mission. As one interviewee said:

And when you merge anything together, it still ain't, it, the fall out from merger I think it will probably take another five years for, for the smoke to totally settle. I seen a big difference between 2003 and where we are now. It, you now, it's about five years now so. . . .It's, it's getting better. (Interview 50)

However, the question remains that if the employees' alignment was done willingly or because of their fears of losing their jobs. As discussed earlier in the communication analysis subsection, some interviewees claimed that any dissent to the internal change vision was going to cost their job. Other interviewees, who were hired while the merger process was undergoing, did not express this belief.

Related to this, is an interesting phenomenon that bears further research.

An assumption of this dissertation research is that the employees who will be

affected by the change will allow the mental model of the change vision to completely replace their existing mental model of how the organization operates. However, it appears that what happened is that the City Archives employees and County Archives employees combined their preexisting mental models and created a new mental model for the operations of the Metro Archives. This was probably because of the similarity in functions between the two agencies, the small size of the groups, and that the employees' roles would not change that much (Interview 47). There was some stress among the County Archives employees because their agency underwent more transformation than the City Archives. As part of the merger, the County Archives had the Historical Preservation portion split off, had to incorporate records management into their job duties, and was placed under the Metro Government's Technology Services agency (Interview 55). What may have happened is that the employees created a compensating change vision through a process of rhetorical communication amongst themselves. They used pieces of their prior mental models to fill in the gaps of the internal change vision to achieve organizational alignment.

Does the Effective Communication of the Change Vision Lead To Alignment?

A major assumption that guided this research is that the effective communication of a well-formed change vision will lead to organizational alignment around the change effort. Based on observations and the opinions of the participants, the Metro Archives merger can be considered successful because the

archive is functioning effectively in the new metropolitan government. Does this mean that the connection between alignment, change vision, and communication is not significant or even nonexistent?

After reviewing the data, there does not appear to be any internal discrepancies in the data. The interviews agree in substance with the incompleteness of the internal change vision and the poor communication of the internal change vision. The content analysis of the communication from the change agent also supports these conclusions.

Where the discrepancy may exist is in the fact that organizational alignment occurred. According to the literature, organizational alignment should not have happened in the case of the Metro Archives merger. One possible explanation is that the external change vision was enough to overcome the problems of the internal change vision but the interviews seem to show that this is not a significant factor. However, the employee who was hired after most of the merger was accomplished stated that the external change vision communication campaign did inform their conception of the change process (Interview 55). Even so, the data seems to support the theory that the employees created a compensating change vision to buttress the internal change vision.

In the final chapter of this dissertation, these findings will be discussed and compared to the concepts discussed in chapter 2. Then, recommendations for further research will be presented along with the implications for positive social change and the researcher's reflections on this dissertation.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Overview

Governments often undergo change efforts because of citizen demands, new political administrations, new technology, or historical events (such as 9/11).

Organizational change is, if not the most studied subject in management, at least in the top five (Fernandez & Rainey, 2006). Nevertheless, there is little empirical research on organizational change especially in the area of creating and communicating a change vision (Caluwe & Vermaak, 2003; Middleton & Harper, 2004; Pietersen, 2002). This dissertation was designed to provide empirical research in through a case study. The secondary purpose of the dissertation was to test the use of mental model interviews and message design logic content analysis in studying the communication of a change vision.

The conceptual model that informed the research design is illustrated in figure 1. The model describes a process in which the change agent creates a change vision. The change agent then uses various communication vehicles (written documents, informal meetings, email, etc.) to communicate the change vision to members of the organization. If the communication efforts are successful, the organizational members will exchange their current mental models of how the organization operates in favor of the change vision. The assumption is that the closer the fit between the organizational member's version of the change vision and the original change vision will lead to closer organizational alignment and thus a better chance of success for the change effort.

From this conceptual model came the study's three research questions. The first question examined the closeness of the fit between the change vision and the participants'

mental models of the change effort. The second question used O'Keefe's (1988) message design logic theory to code the various change vision communications to determine their persuasiveness. In the third question, the researcher examined the alignment between a participant's understanding of the change vision and their willingness to align themselves with the change vision.

The immediate finding from the research is that the change effort was much more complex than the models described in the literature. The research unit for this study was the Louisville Metro Archives that was formed from merger of the Louisville (Kentucky) City Archives and the Jefferson County Archives in 2002. These two small agencies were being combined as part of the city government and county government merger. As will be discussed in the next section, there were two change visions with the public receiving a more complete change vision while the city and county employees received a rather vague and sparse change vision. The communication about the internal change vision was limited, top-down, and not very interactive. Even so, the merger of the City Archives and County Archives into the Metro Archives seemed successful according to employers.

Findings

Organization Alignment Occurred

The major finding from the research is that there was enough organizational alignment between the City Archives employees and the County Archives employees for a successful merger. This is surprising in light of the incomplete internal change vision and the poor communication of the internal change vision. For the change effort to be

& Rainey, 2006; Goleman et al., 2002; Sugarman, 2001). There was very little engagement between the change agent and the employees in this case study as demonstrated by the interview data and content analysis.

For the purposes of this dissertation, alignment is operationally defined as the process whereby employees will exchange their existing mental models of how the organization operates for the new mental model that is the change vision. Alignment is measured by the closeness of fit between change agent mental model of the change vision and the employee's mental model of the change vision. It was assumed that the prior mental model would be completely replaced by the change vision mental model. However, given the issues with the internal change vision and how it was communicated, did the City Archives employees and the Country Archives Employees create their own change vision mental model from merging the internal change vision and their prior mental models? This issue will be explored in the next three sections.

Poor Internal Vision and Poor Communication

There were two major change visions given by the change agent. These two change visions led to contradictory and confusing messages about the merger process. The first change vision was more effectively communicated than the second change vision. This difference in communication effectiveness may have contributed to the creation of a compensating change vision by the Metro Archives employees.

The first change vision, *external*, is the one that was communicated to the voting public. This was a comprehensive and well-described plan as evidenced by the Brookings Institute (2002) report that laid out the vision of the Greater Louisville Metropolitan Government. The core value of the external change vision was competitiveness and there were several strategies designed to achieve that value. Fernandez and Rainey (2006) would consider this a good vision under their definition of a change vision. The external change vision can be considered compelling and successful as the voting public agreed to the merger of the city government and county government. The external change vision had the four components for success in that it was desirable, focused, attainable, and well-communicated (Manus, 1992).

In contrast, the *internal* change vision that was disseminated to the employees affected by the merger was lacking and undercommunicated. It was lacking in that employees were only told to merge and that they had to work out the specifics for themselves (Interview 53). It was undercommunicated in that there was little engagement in communicating the vision. There were also contradictory messages in that the public was assured the merger was going to be a smooth and easy process while, in reality the agencies were struggling with creating the new merged organizations.

So uhm, it was just not a good thing. And, and the other thing that was very humiliating was they would get the powers that be, would get on the TV and say how well everything was, how easy or how well everything was being merged. But anybody with two brain cells know you can't take one entity and take another entity that is totally different, even though there's similarities but there still different. (Interview 50)

Another blow to the credibility of the internal change vision was the assurance that there would be no job losses but, after the merger passed, there were job losses (Interview 50).

The internal change vision would be considered a failure according to Kotter's (1999) criteria. First, the internal change vision was lacking in that it offered no specifics for what a merged government would look like and that it had no strategies for achieving the vision. Second, the biggest obstacle to the internal change vision was the lack of credibility of the change agent who essentially said there would be no pain involved in the merger when the employees knew that there had to be pain. And third, the internal change vision was undercommunicated. Most of the communication came down the chain-of-command with very little effort to engage employees in a dialogue about the internal change vision. As Senge (1990) writes, for a vision to be successful, people must enroll in the vision. The employees were not given the option to enroll in the internal change vision.

Under the ideal change models as described in the literature, dialogue and engaged communication is vital to communicating the change vision (Isabella, 1990; Kotter, 1999; Pietersen, 2002; Senge, 1990; Sugarman, 2001). Thus, the rhetorical level of message design logic (MDL) would be most appropriate in communicating the internal change vision. However, the data analysis shows that the change agent used the conventional level of MDL. The danger is that people can form damaged mental models of the change vision if they are given incomplete or inaccurate information about the change effort and are not allowed to correct their understanding through engagement and reflection (Judson, 1991, p. 40; see also Wind & Crook, 2005). This probably did not

occur in the case of the Metro Archives Merger given that the internal change vision was "okay just merge and however you merge you kind of figure it out among yourselves" (Interview 47). Even so, this probably increased the level of stress and uncertainty as the employees of the City Archives and County Archives had to determine how to merge the agencies in a way that they would keep their jobs and meet with the approval of the change agent. Without the possibility of engagement, the employees could not be certain that they have succeeded or failed in the eyes of the change agent.

An example of this employee anxiety is the low-hanging fruit remark made by a Deputy Mayor at an all-hands meeting. The communication, which could be considered expressive communication under MDL, caused confusion and doubt among the Metro Archives employees. They speculated whether this meant that the archives would be shut down because it was not "revenue making" and that the archives were not valued by Metro government executives (Interview 50). If the employees were allowed to engage the change agent, maybe these fears and misunderstandings could have been handled better.

A good change vision that is effectively communicated is necessary for helping people overcome their natural resistance to change (Gill, 2003). However, this study supports a contrary finding that change can occur despite an inadequate change vision and lack of engagement from the change agent. A possible explanation for this is the creation of a compensating change vision by the Metro Archives employees.

Compensating Change Vision

The data from the interviews suggests the creation of a compensating change vision that seems to be a combination of the internal change vision and the preexisting mental models of the employees. Two factors may have helped in the creation of the compensating change vision. The first is that there was enough similarity between the employees' mental models of how an archives functions that they could meld their individual mental models into a shared mental model. The second factor is that there was a change vanguard that provided the motivation for carrying through with the change effort.

Evidence for the first factor is found in one interviewee's comment. "It was small enough of a group that everyone knew what their tasks were. . . in order to get the work done" (Interview 47). The interviewee further described several meetings in which the two staffs discussed how the new agency was to operate. According to Parris and Vickers (2005), teams are vital in government agencies because the communication between the team members makes them more effective and productive (p. 227). And communication between the City Archives and County Archives may have been easier because their work cultures may have been similar enough to make the eventual merging that much easier (Chin et al., 2002, p. 366; Sackman, 1991). As Ashmos and Nathan (2002) write, the more members share similar cognitive styles the easier it is to create shared mental models (p. 848).

The second factor may be due to a change vanguard. Kelman (2005) argues that organizational members are not naturally resistant to change but actually want change.

These members do not feel that they have the power to affect the change until the organizational leaders signal the need for change. Then the change vanguard is unleashed and they bring about change. "Often change need not be cajoled or coerced. Instead it can be unleashed" (p. 6). The momentum for the successful merger of the Metro Archives could have been supplied by the change vanguard present in both groups of employees.

Taken together, these three findings demonstrate that organizational alignment is a more complex phenomenon than suggested by the organizational change literature. The Metro Archives merger should have been a failure by the standards of the literature's various change models. The internal change vision was lacking in specifics, there was little engagement by the change agent, and the employees were greatly concerned about the personal career implications of the change effort. Even so, the change effort succeeded. It appears from the data that the employees developed compensating methods to affect organizational alignment because the failure to change meant the loss of employment. Thus, the motivation for organizational change can come from the change agent but, in the absence of motivation from the top, the motivation can also come from the change vanguard among the employees.

Tangible Social Change

A disturbing theme in the interviews was the remarks made by some participants that they feared expressing any dissent or asking questions about the merger because they might lose their jobs.

Sets up fear in people and then they just figure well, well you know I just need to keep my, my, my head to the grindstone, keep my mouth shut

because if they'll do that person like that [fire the person] they'll do me like that too. (Interview 50)

Coupled with that is the lack of credibility that some interviewees expressed toward the change agent. "But it was a very unsettling time. . . . Because, you know you can't, you can't believe half of the stuff [the communications from the change agent]" (Interview 50). The literature does have examples of the pain of change efforts but these examples are focused on when the change effort failed (Cabbage & Harwood, 2004; Stevenson, 2001; Tompkins, 2005; Vaughan, 1996). The Metro Archives Merger change effort succeeded despite the pain generated during the process.

The immediate benefit to society from this research is reducing the pain of organizational change felt by the participants. This pain is most apparent when a change effort fails but pain may not be visible in light of a successful change effort. A better understanding of how people conceptualize change and the emotions involved in the construction of the mental models can lead to methods that facilitate successful change while minimizing the negative effects of change. In addition, recognizing and empowering the change vanguard can lower the pain of the change effort and provide a source of innovation, engagement, and energy.

A better understanding of how to achieve effective organizational alignment for successful change efforts will also greatly benefit government. As discussed in chapter 1, the failure rate for government projects is between 70% and 80%. By continuing this research in how to create effective change visions and communications, government agencies can develop methods to bring about better organizational alignment and increase

the success rate for change projects. At the very least, by understanding the true complexity of the change process, government agencies can better plan change efforts and make better decisions about which change efforts to implement.

Recommendations for Further Study

Change efforts that start with a poorly communicated incomplete change vision will not bring about organizational alignment and thus the change effort will fail according to the literature on organizational change. That the Metro Archives succeeded demonstrates the value in performing empirical research to test the ideal change models against actual change efforts. The literature is filled with numerous models but very little consensus on how change actually happens. This example of an organizational change process for a small metropolitan agency demonstrates the complexity of a change effort in government and the numerous issues that need further research. Based on this study, one promising research area is Kelman's (2005) change vanguard and examples of where change came from the bottom-up rather than the usual top-down model.

This research has also pointed toward an interesting phenomenon of the compensating change vision. In the literature concerning change visions, the assumption seems to be that there is only one change vision which is created by the change agent and that the employees can only accept or reject the given change vision. There is some indications in the literature that the employees may be able to shape some aspects of the change vision but there is nothing that indicates examples of employees actually coming up with their own competing change vision. Kolzow (1999) writes about change agents

respecting other change visions but these other change visions do not seem to compete with or affect the change agent's change vision (p. 5). More research is needed on how change visions are created and if there is such a phenomenon as compensating change visions.

Another interesting phenomenon revealed by this that there are two change visions with one being directed toward the public and the other being directed to the employees of the affected agency or agencies. The presence of two parallel change visions could be specific to public agency change efforts but the literature does not mention this. The external change vision was well communicated and was effective enough to convince the public to vote for merger. In contrast, the internal change vision was poorly communicated because there was no real effort to engage government employees in the merger process. Despite the non-engagement, the change effort succeeded at least in the case of the Metro Archives. What exactly is the interplay between the two change visions and the communication efforts?

A broader research area is to examine the leadership style of the change agent in advocating the change vision and engaging the employees of the organization. The literature suggests that a transformational leadership style would be more successful than the transactional leadership style in bringing about organizational alignment necessary for the change effort. In this case, the change agent provided transactional leadership as evidenced by the conventional message design logic communications. Instead, if the change agent practiced transformational leadership would there be greater similarity

between the employees' mental models and more immediate organizational alignment?

What effect would this have had on the change vanguard?

At the least, this dissertation demonstrates the need for more research into understanding the interactions between creating a change vision, communicating the change vision, and bringing about organizational alignment. Organizational alignment is considered an important component in changing an organization but the literature on alignment is limited. The compensating change vision points toward an interesting hypothesis that organizational alignment can come from the bottom-up as well as the top-down. It is recognized in the literature that the change vision is the first step in organizational change and thus more research is needed on this topic and especially more empirical research (Chin, Pun, Ho, & Lau, 2002; Fernandez & Rainey, 2006).

Recommendations for Actions

The immediate action is to share this research in public administration conferences with the hope of having other researchers create case studies using the same research methods. The study demonstrates that there is little similarity between the mental models so a baseline for determining when mental models are in sufficient alignment needs to be established. Toward this, more examples of methods for communicating change visions need to be collected and studied. This research methodology is a promising method for studying organizational change and should be replicated in a wide range of public administration settings.

A practical application from this research is a better awareness of the pain that can result from poorly created change visions and not engaging employees in the change

effort. Government change agents should become aware that there is more than one change vision and that they need to spend just as much effort on the internal change vision as they do on the external change vision. Change agents should also realize the existence of change vanguards and work to recruit them into the change effort to help increase the possibility of success of change efforts. Possible avenues for disseminating the results of this research are through government conferences and through organizations such as the Brookings Institute.

Reflections by the Researcher

In my career as a public servant, I have been involved in many change efforts. I went through several change efforts during my four years at the Kentucky Natural Resources and Environmental Protection Cabinet. When I worked in the federal government between 1997 and 1999, Vice-President Gore's reinvention project was still active. I would estimate that in my seven years of public service that I have been through at least five change efforts ranging from a departmental level to the agency as a whole. Like the interviewees, I have been in change efforts that were imposed from above and there were no opportunities to offer feedback. I have also been in change efforts where feedback was encouraged and suggestions from the employees was solicited and awarded. It was my impression that the more successful change efforts was the ones with employee engagement and a compelling change effort. This is the impetus for my interest in organizational change in public administration.

Another reason for my interest was my research for the Knowledge Area Module Five project that was about the causes of failure in government projects. The Knowledge Area Module is a requirement of the Walden University PhD program and is an extended review and synthesis of the academic literature on a public policy and administration topic. After reviewing the literature on change management, I realized that there were numerous change models with the common themes of vision, communication, and alignment. I was particularly interested in these topics being a communication scholar and a management scholar. Based on my own experiences, I felt that the conclusions that the researchers found were true but more data that is empirical was needed before justifying their prescriptive theories. This was the reason for this dissertation topic and the research design.

Before starting this research, my preconceptions were that there would be one change vision; that the change vision would be communicated frequently and in many communication forms (verbal, print, electronic, etc.); and that it would be easy to distinguish between the prior mental models and the change vision. In reviewing my interview transcripts, I can see that preconception influencing many of my questions. It was not possible in this research but, when I do replicate this study, I will arrange for a second round of interviews after I review the first set of interviews. There are some interesting responses in this set of interviews that I wish I could follow up on.

I was also surprised by the observation that the Metro Archives actually functioned well. Again, my preconception based on the ideal change model led me to believe that without a good change vision and the effective communication of that change

vision, the change effort would fail. Part of the excitement of research is when you find a phenomenon you never expected or contrary conclusions than what is suggested from the literature.

I also believe that my research design of a case study utilizing mental model interviews and MDL coding of change vision communications is a valid research design. A vital part of the empirical research in organizational change is to find a way to compare change visions, communications, and organizational alignment consistently across various change efforts in different levels of governments and different types of agencies. Focusing on mental models and how they are constructed appears to be a promising approach to this topic.

Conclusion

According to the apocryphal story about the bumblebee, the results of this research defy the conclusions of the organizational change literature. The bumblebee should not be able to fly according to physics and yet it does. In the same vein, a change effort should not succeed if the change vision is inadequate and poorly communicated because organizational alignment will not happen. However, the Metro Archives merger succeeded because organizational alignment occurred among the team members. It appeared that the employees created a compensating change vision that was a combination of their shared prior existing mental models and the internal change vision. It also appeared that there was no need for engaged communication from the change agent because the change vanguard provided the engagement among the employees.

Based on this case, the connections between organizational alignment, change vision, and communication is more complex than the literature would indicate.

The main purpose of this research was to provide empirical data to explore the prescriptive theories of organizational change. Despite the great amount of thought concerning organizational change, this research substantiates the need for empirically testing the change models and for a deeper exploration of the links between alignment, change vision, and communication.

REFERENCES

- Albrecht, S. (2005). Leadership climate in the public sector: Feelings matter too. *International Journal of Public Administration*, 28, 397-416.
- Anderson, L. A., & Anderson, D. (2001). *The change leader's roadmap*. San Francisco: Jossey-Bass/Pfeiffer.
- Andrews, R., Boyne, G. A., & Enticott, G. (2006). Performance failure in the public sector: Misfortune or mismanagement? *Public Management Review*, 8(2), 273-296.
- Argyris, C. (1994). Good communication that blocks learning. *Harvard Business Review*, 77-85.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, 46(6), 681-703.
- Ashmos, D. P., & Nathan, M. L. (2002). Team sense-making: A mental model for navigating uncharted territories. *Journal of Managerial Issues*, 14(2), 198-217.
- Balogun, J. (2007). The practice of organizational restructuring: From design to reality. *European Management Journal*, 25(2), 81-91.
- Bennis, W., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row, Publishers.
- Black, J. S., & Gregersen, H. B. (2003). *Leading strategic change: Breaking through the brain barrier*. Upper Saddle River, NJ: FT Prentice Hall.
- Box, S., & Platts, K. (2005). Business process management: Establishing and maintaining project alignment. *Business Process Management Journal*, 11(4), 370-387.
- Boyne, G., Martin, S., & Walker, R. (2004). Explicit reforms, implicit theories, and public service improvement. *Public Management Review*, 6(2), 189-210.
- Brookings Institute, (2002). Beyond merger: A competitive vision for the regional city of Louisville. Washington, DC: The Brookings Institution Center on Urban and Metropolitan Policy.
- Burns, K. (2005). Mental models and normal errors. In H. Montgomery, R. Lipshitz, & B. Brehmer (Eds.), *How professionals make decisions* (pp. 15-28). Mahwah, NJ: Lawrence Erlbaum Associates.

- Cabbage, M., & Harwood, W. (2004). Comm check...: The final flight of Shuttle Columbia. New York: Free Press.
- Caluwe, L., & Vermaak, H. (2003). *Learning to change: A guide for organization change agents*. Thousand Oaks, CA: Sage Publications.
- Carley, K. M. (1997) Extracting team mental models through textual analysis. *Journal of Organizational Behavior*, 18, 533-558.
- Carley, K. M., & Diesner, J. (2005). AutoMap: Software for Network Text Analysis.
- Carley, K., & Palmquist, M. (1992). Extracting, representing, and analyzing mental models. *Social Forces*, 70(3), 601-636.
- Chin, K, Pun, K., Ho, A. S. K., & Lau, H. (2002). A measurement-communication-recognition framework of corporate culture change: An empirical study. *Human Factors and Ergonomics in Manufacturing*, 12(4), 365-382.
- Choo, C. W. (1998). The knowing organization: How organizations use information to construct meaning, create knowledge, and make decisions. New York: Oxford University Press.
- Cloke, K., & Goldsmith, J. (2002). *The end of management and the rise of organizational democracy*. San Francisco: Jossey-Bass Publishers.
- Collins, J. C., & Porras, J. I. (1991). Organizational vision and visionary organizations. *California Management Review*, 30-52.
- D'Aprix, R. (1996). Communicating for change: Connecting the workplace with the marketplace. San Francisco: Jossey-Bass.
- Day, J. D., & Jung, M. (2000). Corporate transformation without a crisis. *The McKinsey Quarterly*, 4, 117-127.
- Dekker, S. W. A., & Schaufeli, W. B. (1995). The effects of job insecurity on pyschological.health and withdrawal: A longitudinal study. *The Australian Psychologist*, 57-63.
- Denning, S. (2005). The leader's guide to storytelling: Mastering the art and discipline of business narrative. San Francisco: Jossey-Bass.
- ______. (2001). The springboard: How storytelling ignites action in knowledge-era organizations. Burlington, MA: Elsevier.

- Denton, D. K. (1997). Building a shared vision. SAM Advanced Management Journal, 35-39.
- Druskat, V. U., & Pescosolido, A. T. (2002). The content of effective teamwork mental models in self-managing teams: Ownership, learning, and heedful interrelating. *Human Relations*, 55(3), 283-314.
- Duck, J. D. (2001). The change monster: The human forces that feed or foil corporate transformation and change. New York: Crown Business.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Ellis, B. H. (1992). The effects of uncertainty and source credibility on attitudes about organizational change. *Management Communication Quarterly*, 6(1), 34-57.
- Fahim, M. (2006, December 24th). Louisville Metro has shown other regions how mergers can change balance of power. *CityMayors*. Retrieved on April 4, 2008 from http://www.citymayors.com/government/louisville.html.
- Farmer, B. A., Slater, J. W., & Wright, K. S. (1998). The role of communication in achieving shared vision under new organizational leadership. *Journal of Public Relations Research*, 10(4), 219-235.
- Fernandez, S., & Rainey, H. G. (2006). Managing successful organizational change in the public sector. *Public Administration Review*, 168-176.
- Gargiulo, T. L. (2005). The strategic use of stories in organizational communication and learning. Armonk, NY: M.E. Sharpe.
- Gill, R. (2003). Change management or change leadership? *Journal of Change Management*, 3(4), 307-318.
- Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston: Harvard Business School Press.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, 9(3), 438-448.
- Harai, O. (1995). Three vital little words. Management Review, 25-27.
- Hayes, J., & Allinson, C. W. (1998). Cognitive style and the theory and practice of individual and collective learning in organizations. *Human Relations*, *51*(7), 847-871.

- Hullman, G. A. (2004). Interpersonal communication motives and message design logic: Exploring their interaction on perceptions of competence. *Communication Monographs*, 71(2), 208-225.
- Huzzard, T., & Ostergren, K. (2002). When norms collide: Learning under organizational hypocrisy. *British Journal of Management, 13*, S47-S59.
- Isabella, L. A. (1990). Evolving interpretations as a change unfolds: How managers construe key organizational events. *Academy of Management Journal*, 33(1), 7-41.
- Johnson-Laird, P. N. (1983). *Mental models: Toward a cognitive science of language, inference, and consciousness.* Cambridge, MA: Harvard University Press.
- Judson, A. S. (1991). *Changing behavior in organizations: How to approach and manage change* (Rev. Ed.). Cambridge, MA: Basil Blackwell.
- Kelman, S. (2005). *Unleashing change: A study of organizational renewal in government*. Washington, DC: Brookings Institution Press.
- Kline, D. A. (2005). Intuitive Team Decision Making. In Montgomery, H., Lipshitz, R., & Brehmer, B. (Eds.). *How professionals make decisions*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers, 171-182.
- Kolkman, M. J., Kok, M., & van der Vee, A.(2005). Mental model mapping as a new tool to analyse the use of information in decision-making in integrated water management. *Physics and Chemistry of the Earth*, 30, 317-332.
- Kolzow, D. (1999). A perspective on strategic planning: What's your vision? *Economic Development Review*, 16(2), 5-9.
- Kotter, J. P. (1999). *John P. Kotter on what leaders really do.* Boston: Harvard Business Review.
- _____(1996). Leading change. Boston: Harvard Business Review.
- Labovitz, G., & Rosansky, V. (1997). The power of alignment: How great companies stay centered and accomplish extraordinary things. New York: John Wiley & Sons.
- Lichtenstein, B. B. (2000). Self-organized transitions: A pattern amid the chaos of transformative change. *Academy of Management Executive*, 14(4), 128-141.

- Levin, I. M. (2000). Vision revisited: Telling the story of the future. *The Journal of Applied Behavioral Science*, 36(1), 91-107.
- Lipsky, M., & Smith, S. R. (Winter, 1989-1990). Nonprofit Organizations, Government, and the Welfare State. *Political Science Quarterly*, 104(4), 625-648.
- Locke, E. A., Kirkpatrick, S., Wheeler, J. K., Schneider, J., Niles, K., Goldstein, H. et al. (1991). *The essence of leadership: The four keys to leading successfully*. New York: Lexington Books.
- MacMillan, J., Entin, E. E., & Serfaty (2004). Communication overhead: The hidden cost of team cognition. In Salas, E., & Fiore, S. M. (Eds.). *Team cognition: Understanding the factors that drive process and performance*. Washington, DC: American Psychological Association, 61-82.
- Mai, R., & Akerson, A. (2003). The leader as communicator: Strategies and tactics to build loyalty, focus effort, and spark creativity. New York: AMACOM.
- Manus, B. (1992). Visionary leadership. San Francisco: Jossey-Bass Publishers.
- McComb, S. A., Green, S. G., & Compton, W. D. (1999). Project goals, team performance, and shared understanding. *Engineering Management Journal*, 11(3), 7-12.
- Meier, K., & Bohte, J. (2003). Not with a bang, but a whimper: Explaining organizational failures. *Administration & Society*, 35(1), 104-121.
- Mellahi, K., & Wilkinson, A. (2004). Organizational failure: A critique of recent research and a proposed integrative framework. *International Journal of Management Reviews*, 5/6(1), 21-41.
- Merger FAQ (2002). Retrieved from Metro Archives, May 30, 2008.
- Middleton, P., & Harper, K. (2004). Organizational alignment: A precondition for information systems success? *Journal of Change Management*, 4(4), 327-338.
- Miller, D. (2002). Successful change leaders: What makes them? What do they do that is different? *Journal of Change Management*, 2(4), 359-368.
- Miller, V. D., Johnson, J. R., & Grau, J. (1994). Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22, 59-80.

- Morgan, M. G., Fischhoff, B., Bostrom, A., & Atman, C. J. (2002). *Risk communication: A mental models approach*. New York: Cambridge University Press.
- Nadler, D. A., Shaw, R. B., Walton, A. E., & Associates. (1995). *Discontinuous change: Leading organizational transformation*. San Francisco: Josey-Bass Publishers.
- NVivo qualitative data analysis software; QSR International Pty Ltd. Version 8, 2008.
- Nutt, P. C., & Backoff, R. W. (1997). Crafting vision. *Journal of Management Inquiry*, 6(4), 308-328.
- O'Keefe, B. J. (1988). The logic of message design: Individual differences in reasoning about communication. *Communication Monographs*, 55, 80-103.
- Parris, M. A., & Vickers, M. H. (2005). Working in teams: The influence of rhetoric from sensemaking to sadness. *Administrative Theory and Praxis*, 27(2), 277-300.
- Parry, K. W., & Proctor-Thomson, S. B. (2003). Leadership, culture and performance: The case of the New Zealand public sector. *Journal of Change Management 3(*4), 376-399.
- Penhallurick, J. (1995). Communication and role stress in a government organization. In Cushman, D.P., & King, S.S. (Eds.). *Communicating organizational change: A management perspective*. Albany, NY: State University of New York Press, 191-223.
- Peterson, L. W, & Albrecht, T. L. (1996). Message design logic, social support, and mixed-status relationships. *Western Journal of Communication*, 60(4), 291-309.
- Pietersen, W. (2002). The Mark Twain dilemma: The theory and practice of change leadership. *Journal of Business Strategy*, 32-37.
- Reger, R. K, Gustafson, L. T., Demarie, S. M., & Mullane, J. V. (1994). Reframing the organization: Why implementing total quality is easier said than done. *Academy of Management Review*, 19(3), 565-584.
- Rentsch, J. R. & Woehr, D. J. (2004). Quantifying congurence in cognition: Social relations modeling and team member schema similarity. In Salas, E., & Fiore, S. M. (Eds.). *Team cognition: Understanding the factors that drive process and performance*. Washington, DC: American Psychological Association, 11-31.
- Robertson, P. J., & Seneviratne, S. J. (1995). Outcomes of planned organizational change in the public sector: A meta-analytic comparison to the private sector. *Public Administration Review*, 55(6), 547-558.

- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data* (2nd Ed.). Thousand Oaks, CA: SAGE Publications.
- Sackmann, S. (1991). *Cultural knowledge in organizations: Exploring the collective mind*. Newbury Park, CA: SAGE Publications.
- Salas, E., & Fiore, S. M. (2004). Why team cognition: An overview. In Salas, E., & Fiore, S.M. (Eds.). *Team cognition: Understanding the factors that drive process and performance.* Washington, DC: American Psychological Association, 3-8.
- Senge, P. M. (1990). *The fifth discipline: The art & practice of the learning organization*. New York: Doubleday.
- Simon, H. A. (1991). Bounded rationality and organizational learning. *Organization Science* 2(1), 125-134.
- Stevenson, J. P. (2001). The \$5 billion misunderstanding: The collapse of the Navy's A-12 stealth bomber program. Annapolis, MD: Naval Institute Press.
- Stewart, J., & Kringas, P. (2003). Change management Strategy and values in six agencies from the Australian public service. *Public Administration Review*, 63(6), 675-688.
- Sugarman, B. (2001). A learning-based approach to organizational change: Some results and guidelines. *Organizational Dynamics*, 30(1), 62-76.
- Thompson, D., Socolar, R., Brown, L., & Haggerty, J. (2002). Interagency collaboration in seven North Carolina counties. *Journal of Public Health Management Practices*, 8(5), 55-64.
- Tompkins, P. K. (2005). *Apollo, Challenger, Columbia: The decline of the space program: A study in organizational communication.* Los Angeles: Roxbury Publishing,
- Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review*, 20(3), 510-540.
- Vaughan, D. (1996). *The Challenger launch decision*. Chicago: University of Chicago Press.
- Verschuren, P. J. M. (2003). Case study as a research strategy: some ambiguities and opportunities. *Social Research Methodology*, *6*(2), 121-139.

- Walshe, K., Harvey, G., Hyde, P., & Pandit, N. (2004). Organizational failure and turnaround: Lessons for public services from the for-profit sector. *Public Money & Management*, 201-208.
- Westley, F. (1992). Vision worlds: Strategic vision as social interaction. *Advances in Strategic Management*, *8*, 271-305.
- Wind, Y, & Crook, C. (2005). *The power of impossible thinking: Transform the business of your life and the life of your business.* Upper Saddle River, NJ: Wharton School Publishing.
- Yin, R. K. (2003). *Case study research: Design and methods*. Thousand Oaks, CA: Sage Publications.

APPENDIX A: MENTAL MODEL INTERVIEW QUESTIONS*

<u>Part One – Extract Mental Model of the Change Vision:</u>

Overview: The purpose of the following questions is to have the interview subject as completely as possible, describe their mental model of the change vision. The interviewer must NOT influence or indicate preferred answers. The following prompts may be used to encourage the interview subject to continue with their answer but care must be taken not to indirectly or directly inject the interviewer's perceptions or observations into the final answer.

Opening question: Please describe in detail all that you know and have heard about the [title of the organizational change project].

Prompts to keep the interview going:

- 1. Anything else?
- 2. Can you tell me more [about that]?
- 3. Anything else don't worry about accuracy. Just tell me your impressions.
- 4. Can you explain in more detail?

If the subject draws a blank, try these in order:

- 1. Have you heard about the [title of the organizational change project]?
- 2. Let me see if I can help you remember. The [name of agency] launched a change project called [title of the organizational project]. Can you remember anything about the project?

3. Maybe this will help. The [name of agency] launched a change project called [title of the organizational project] to improve working conditions. Did you observe a change in working conditions?

<u>Part Two – Communication of Change Vision</u>

Overview: Use these questions only if the subject can give an adequate description of the change vision. As instructed in Part One, care must be taken so that the interviewer's opinions or observations are not reflected in the interview subject's answers.

- 1. How did you first hear of the change project?
- 2. After that initial communication of the change project, were there any other messages about the change project? Please list as many as you can remember and describe how they were communicated (email, newsletter, meeting, etc.).
- 3. In your opinion, which of the messages best explained the change project?

 Which one was the most persuasive? Why?
- 4. Were you given a chance to ask questions about the change project? In what way could you ask questions (via email, at a meeting, etc.)?
- 5. Were you given a chance to make suggestions concerning the change project? If so, did you feel that your suggestions were being considered by the people in charge of the project?
- 6. How could the [title of the agency] improved the ways they communicated information about the change project?

7. What other ways did you learn about the change project? Through coworkers?

News reports? Any other communication channels other than direct

communications from the change project team or the [title of the agency]

management?

^{*} Questions adopted from Morgan et al., (2002, pp. 68-69)

APPENDIX B: INTERVIEW 46

Okay, so, please describe in detail all that you know about the merge between the City and the County archives to the Metro archives.

Okay. Uhm, local Metro Jefferson County government merged in Janu, on January 6, 2003. Uh, at that time the, there was a county archives, that was really, it was Historic Preservation and Archives I think was the name of the department and on the City side there was department called Department of Archives that was a division of, at that time the Finance department. Uhm, on the County side uh, I think it was a separate department Historic Preservation and Archives. And so when those two departments merged uhm, we, we looked at you know, what was going to be the main function uh, for those groups cuz the function was the function that was taken away out of the County side was the historic preservation part that they would not be responsible for uh, that so we were only taking on the actual uhm, records and retention the historic archives uh, uhm, group for that. So on the County side there were several employees and on the City side there were two or three employees at that time and so what we wanted to look at was how to merge the functions of those groups, the people of those groups and the locations. Uhm, what we did first was we merged the uh, the people uh, in those groups where we had and we named it, a primary supervisor so we took the person who was the primary supervisor for the City archives and moved her to the physical location where the County archives people worked and had her primarily work out of that location uhm, because we, we were in four different locations uh, and I don't know if you want to know those locations but they were at like 810 Barrett Avenue, they were at Global Gardens, Memorial Auditorium and there was a couple different, I think there was one other location where they had some collection uhm, and so while they physically moved the people we were still had collections in three or four different locations and so that was a challenge for us to overcome that uh, for a long time until we actually physically merged the locations which was done last Janu, January of 2007. So that was, that was kind of the last step. But in the meantime we started merging, uhm, uh, policies and procedures and most of that was done internally within that group. From our standpoint, from the administration side we pretty much left it up to them to determine uh, how they wanted to do it, uh, what they wanted to do and what uh, what they wanted to look at as they started merging. We just gave them the directive or the understanding that they needed to, to merge those groups. Uhm, merge the, merge the policies, start merging the records, uhm, start understanding, cross training people in each group so that the County people started to understand what the City collection had, the City people started to understand what was in the county collection and then to start uhm, so that they could both do those jobs uh, if there, if someone was out for the day or if someone left uh, permanently we would be able, we would be covered there. Uhm, so that was kind of the first step was to get the people working together and then start merging the collections and then again the final step was the, the physical move uh to a location that was just completed last year. That was kind of it from a high, from a high level.

APPENDIX C: INTERVIEW 47

The second part. Now you talked about directive and understanding. You can look at me now.

Okay.

That was a memo, how was that communicated.

Uh, it was probably communicated orally. Perhaps by email but it wasn't an official email that said you will now begin doing this or anything. It was more, more than likely it was the XXXXX and myself. We went out to meet with uh, that staff uh, to discuss with them what our, you know, what they needed to be doing. What our hopes and aspirations were for that group.

Okay.

I'm just trying to understand the challenges and opportunities uh, for them also.

Okay, so, other than that oral presentation basically and maybe an email that was all that you all did?

That was it. Yeah.

Oh.

You know I, I think and that's probably because there was that larger understanding from the Mayor to all the agencies we're merging.

Yeah.

You know you have to start doing things together now. You have to start you know cuz every agency had, almost every agency had a counterpart.

Yeah.

You know even in, in our group, technology, we had a counterpart that we merged with.

Uhm, huh (positive).

So we had to start learning stuff.

Okay.

To do stuff together and do things sometimes differently.

Okay. So how did they communicate that merger to you? How that was going to work? Did they give you any kind of official documents or?

No there wasn't.

Just kind of orally?

It was orally. It was from in the early uh, phases of the merger there was a cabinet system.

Uhm, huh (positive).

So our director, XXXXX, reported to the cabinet for Finance and Administration.

Right.

So he would pretty much say okay you gotta do this or you know this is the way you're gonna do it and so she would pass that along to us or he would say oh you need to merge archives you know good luck.

Okay just merge and however you merge you kind of figure it out among yourselves.

Yeah the idea was to have you know, we knew we were merging two entities and the need to have, out of that needed to come one entity.

Well, there was like an official project plan or calendar or anything like that?

No we did not.

Uhm, okay,

The only thing we had an official calendar for was the physical move.

Yeah.

When we moved from the three or four locations to the one location.

Okay.

That's the only thing we had a project plan for.

Oh, okay.

At my level.

At your level?

Yeah,

Okay. And that was for the archives when you did that?

That was for archives when we moved yes.

Is there any way I can get a copy of that? Is that, I mean if it's not offfical or whatever.

Uhm, no, I don't know if I have that or not.

I'll ask for it though.

Yeah you might ask XXXXX if she has that.

Okay.

Because we had a, because the project plan was actually done by an outside contractor.

Ahh.

We didn't do it internally.

Okay.

We hired someone to manage that move,

Uhm, huh (positive).

Mainly because of the complexity of it. Because when they did the move.

Yeah.

They actually did all the collection and bar coded it.

Uhm.

And they took it from where it was going and bar coded it to the new collection so that the box has a label on it.

Uhm, huh (positive).

Based on what's in the box, the broad category of what's in the box and where the locate, shelf location at the new place.

Okay, okay. Uhm, so I mean, you even changed after the, I mean after you had communication memos you had a meeting and such about this. It sounds to me like it's more informal that you're basically just told you were gonna merge?

With this group is it was pretty informal and a, and a large reason for that it was a small group.

Okay.

I mean right now there's a staff of five people in the archives group.

Okay.

Uhm, it's uh, the supervisor and four, four employees.

Sure. Did you have a meeting with all of them? Kind of a kick off meeting?

Yeah we had several of those with that group. Especially uhm, at the beginning we did. We introduced uh, XXXX, XXXXX introduced herself to everyone and I would go to those because that group reported to me at that, at that time.

Okay.

Uhm, and then you know, talked about XXXX being the man, the supervisor for that group as far as managing the day to day activities. Uhm, it was small enough of a group that everyone knew what their tasks were.

Okay.

In order to get the work done.

Oh okay.

It wasn't like you were bringing a hundred people together and uh, so I felt like we were a little more informal.

Uhm, huh (positive).

In that, in that group and probably because for that reason. Cuz of the size.

Okay, sure, okay. And from the Mayor's office I guess did they have formal, I mean you basically, they just kind of orally communicated to you. Did they have any formal documents?

Our formal documents were the budgets.

The budgets?

The budget documents.

Okay.

And so you know it was more of the budget instructions may have been formal.

Uhm, huh (positive).

But it was more of you need to put your budget together and it needs to reflect a combined group and oh by the way you have to show a ten percent decrease in the first year.

Oh.

So you know we had to show that we weren't raising funds.

Uhm, huh (positive).

Or we weren't increasing tax dollars and we had to do it efficiently. You know the Mayor liked to tell a story of you know here we were we were all coming together and we were on the top for the public you know we had to show that we were still functioning everything but underneath like a duck we were paddling like hell under water. So he used that analogy a lot and I think that was pretty accurate.

Yeah.

Of you know the public had, we still had to deliver those services to the public.

Yeah.

But it was still pretty busy underneath, underneath the water there.

Okay. Great. Well that's all I have. I thank you so much.

APPENDIX D: INTERVIEW 49

So do you consent to being interviewed today?

Yes.

Okay. So uhm, my question is to you when you first heard about merger, in the mergering of County and City archives how did you conceive that? What did you think that was going to mean?

Well what I thought it would mean would be that uhm, they would find a place that would be suitable for all of the old City archives holdings and their offices and our offices cuz I used to work for the old City and the new Metro would also you know, realize that we needed a place big enough so that the old County archives could all be in one, one location. And, and I thought that was a good thing. Because uhm, over the years you know people would, who, who would call us or would come out to look at records they would think that we had records that we didn't have and then I'd have to direct them to go over to the old County location then vice versa people would go over there looking for stuff that maybe we had at the City. So we always knew that it would be a good thing if we could combine the two because for the citizens and the people who do research they could come to one place and find what they needed instead of having go two separate places to do the research on anything that happened in Jefferson County government.

Okay. So how was the merger of the City and County described to you?

It was always described very ambiguously. Because, because they, they never really knew where they were gonna put us. And so that was always the big question. Where are, what, what facility, what building could we possibly use uhm, that would accommodate both of these separate archives, their holdings. Uhm, and you have to realize that the old city was at Memorial Auditorium which had quite a bit of uhm, uh, storage area in the basement. But we had had floods in that basement previous to merger. So I, I always liked the idea of getting up out of the basement. Uhm, the old County had moved quite a few times. They were at 810 Barrett but yet they had their non permanent stuff still stored down in the basement of Louisville Gordons. So what was very interesting to me was I was hearing more conversation outside of government about where we should go from people who were interested in seeing that the archives got a good place to be moved to. Uhm, we, we had people just calling us from the outside and saying stuff to us that internally people weren't discussing that with us. So that was kind of strange. That, that you had people from the outside that didn't have even any positions, these people weren't, weren't metro government employees you see what I'm saying. They were people from the outside who were very interested in we even had people from the state archives calling us and discussing well do you know where you're gonna go, do you

know where the, where all your holdings are gonna be moved to? And we, we, we would always say well no ones informed us of where we're going.

Uhm.

So, uhm, I thought that was extremely strange that we didn't have people internally telling us stuff or asking us stuff. We just, we just had people from the outside making, making all these, these moves and setting up moves to discuss it. Uhm, cuz there was a meeting at one point early on after, well it might have been in 2002 actually before merger was actually uh, actually happened in January 2003 that there was a meeting that was held at the Brown Hotel and, and these were concerned people, you know uhm, educated people mostly who, who, who were just concerned about where the archives was going to, to be relocated to. And they came up with strategies but and they submitted them to, to, to the powers that be at Metro government but it didn't do any good because from that meeting they actually suggested that Louisville Gordons be used and, and the reason why they wanted to use Louisville Gordons because it was so centrally located but the powers that be didn't. I don't think they took that suggestion very seriously.

APPENDIX E: INTERVIEW 50

I was going to ask you now, you kind of told me a lot about how you heard about the change, you know the merger and such, and I notice now looking through the files mostly was newspaper clippings. I saw a couple emails but when they first told you about the merger I mean how did you find out? Primarily, I mean how did the mayor's office basically communicate with you about the merger?

Uh, it came through our director.

Uhm, huh (positive).

It came through our director. And one of the things that I thought was very strange, they had us taking a lot of our time sitting up filling out this damn form that told what uhm, your job was, what, what was the name of your job, the title of your job, what were your job duties, and they, they wanted, they wanted you to, from the time you started in government.

Uhm, huh (positive).

You had to, you had to tell this long drawn, it was like a resume really.

Uhm.

But it was a form they wanted you to fill out but it was like, writing a resume because you was telling every job you ever did in government and, and what it entailed and it was stupid.

And then, I mean so you sent in the form and then what happened? Did you hear back on it?

No, no. But that was, but okay, yeah, but you did hear back on it. Because what they did was

they demoted everybody.

Oh, okay.

So I went from being a manager to being a supervisor.

Uhm, huh (positive).

And uhm, even people today are very angry because they did a whole lot of things to us. First they, most of us got demoted, then they went from a thirty five hour to a forty hour

week. And, and all of us was so stupid we was just thinking that we were gonna get paid extra money for these extra hours but we didn't.

Uhm, huh (positive).

So really you were getting, if you gotta work more hours at the same rate of pay, actually you're getting paid less.

Yeah.

So uhm, it was just not a good thing. And, and the other thing that was very humiliating was they would get the powers that be, would get on the TV and say how well everything was, how easy or how well everything was being merged. But anybody with two brain cells know you can't take one entity and take another entity that is totally different, even though there's similarities but there still different.

Uhm, huh (positive).

And when you merge anything together, it still ain't, it, the fall out from merger I think it will probably take another five years for, for the smoke to totally settle. I seen a big difference between 2003 and where we are now. It, you now, it's about five years now so

Uhm.

It's, it's getting better.

Uhm.

But you give another five years.

Yeah.

We'll probably be where they been saying we were four or five years ago you know they said everything was hunky dory and it really wasn't.

Right.

I mean you got people working side by side, one from the old county, one from the old city they got the same classification and making totally different amounts of money.

Uhm, huh (positive).

That is not good for morale.

No.

And just for, there's a lot of that kind of stuff going on.

Did they give you a chance to tell them this? I mean did you get a chance?

No.

Okay. So basically they just told you how things were gonna be?

Yeah and basically whenever you heard anything or say you read something that came from the

Mayor's office on the, on the computer you always got the feel that keep your mouth shut, do your work, and, and uhm, and maybe, you know maybe you'll be able to keep your job. Cuz what they did, well what I always disliked was the Mayor came on the TV before people even voted on merger and said that nobody was going to lose their job because of merger. And I remember seeing that commercial on TV. But once merger passed he just flip flop and then he was saying how basically. I, I could, I could have lived with it if, if they had did this big attrition thing.

Uhm, huh (positive).

Where the older workers, they would have bought them out.

Uhm, huh (positive).

And it, that would have made sense to me but you had people losing their jobs that had been around for a while, seventeen, fifteen years. I know one case in particular where this person had worked for seventeen years and I, and I'm saying well if, if they wasn't a good worker and they hadn't uh, met the qualifications how could they have, continue to be an employee but then when merger comes all of a sudden bam that person's out the door with, and they got seventeen years and they're just out the door.

Yeah.

Of course I didn't get to talk to the person to try to understand how that person got the axe.

Right.

But, but there were quite a few people who that happened to.

Uhm, huh (positive).

And, you know, with that kind of thing.

Right.

Sets up fear in people and then they just figure well, well you know I just need to keep my, my, my head to the grindstone, keep my mouth shut because if they'll do that person like that they'll do me like that too.

Uhm, huh (positive). So I mean how'd you hear about most of the merger stuff? I mean was it on TV when you went home? Or you read it in the newspaper? I mean did you get more of that from that than did you?

I got more from reading what was in the newspaper, word of mouth people saying stuff.

Uhm, huh (positive).

On the television than really you know getting something on the email or being called into a meeting.

Uhm, huh (positive).

It, it was a very uhm, I don't want to use the word scary.

Yeah.

But it was a very unsettling time.

Okay.

Because, you know you can't, you can't believe half of the stuff.

Right.

That you're actually hearing word of mouth but at the same time.

Uhm, huh (positive).

I don't think that we were well informed internally.

Okay.

I really don't.

Okay. Cuz I mean usually in most change projects they tell you to have like a forum and you get al.l the people together and the, you know, the powers that be explain what's going on and take all the questions in. You all get anything like that?

Well we, we had one time when we, we were called into a meeting and uhm, to this day we make the same joke.

Uhm, huh (positive).

Because one of the Deputy Mayor's made comment that the archives was the low hanging fruit which, what the hell does, does that mean? We're the? And, and, and ever sense then, you know, we, we make this little personal joke in between us that where that day, basically it was just me and David actually, we were at the meeting. And I wonder why, what are low hanging fruit? and so we took it like we were dispensable. You know, because we're not a, we're not a revenue uhm, making. Right.

You know, uh, entity. So no one cares about archives until they need something. They need a piece of paper, they need a, uhm, a copy of a check to prove that these people who're trying to sue the City actually did get paid. We're, we're not in the limelight and so you know you're important for, for that minute that that person needs that file. They get that file uh, they're happy for a minute and then they go on about their business. And, and no one ever wants to do the work that you have to do to keep records in order and send them to archives so that five years from now, if you need it, then you can get back to it or three years or whatever length of time the record is suppose to stay around. People don't care about it unless they got an emergency.

Yeah.

So, so you know we know what we do here and we know it's valuable work. But a lot of people if you ask them what we do they'd be hard pressed to tell you what we do.

I know, that's true. Well that's all I have on this so. Great, yeah.

Okay.

APPENDIX F: INTERVIEW 51

So are you consenting to be interviewed today?

Yes.

Okay let me go again and just ask you the first question it's a big one and just tell me everything you remember about the merger of the City and County archives.

I first heard of the merger from the TV, the media. And they had been wanting it, I think, several years before that. And then when it, when it all came about the way we was supposed to, we was just supposed to become one, one group. And that's all I know.

Okay. Uhm ,did they uhm, did they kind of give you any detail about that or you know, did you get a memo or something that kind of explained it in more detail for you?

We, I'm trying to think if, we, I'm, I'm gonna say I might have received an email about the merger and how it was planned out.

Okay. Well that's fine. So I mean, so you got, you know, how? Let me go ahead and do the second part of the interview then, so that's fine. Uhm, so essentially you just got an email. You heard more about it on television, newspaper, what you read in the newspaper?

Yes.

Okay. And your co-workers probably talked about it too.

Yeah a lot of people talked about the merger.

Uhm, huh (positive).

And how some didn't like it and some did like it.

Okay. Now did you get anything from, and uh, she was calling it the powers that be, but you know, the people that were in charge of it did you get anything more specific from them? Did they call you into meetings? Did they maybe have a kick off meeting what they call you know where they got you in a room said you could ask questions about this?

Well I'm gonna be honest with you. I can not even think of that but serious business I think that we might have had a meeting downtown with, with the big people.

Uhm, huh (positive).

To discuss how it was gonna you know, be put together and how things was gonna be ran. How this merger was gonna change and you know no one was gonna lose their jobs and you know I never thought that. I always thought that if you bring two different people together and we're all doing the exact same job somebody was gonna end up losing their job.

Uhm, huh (positive).

And that's what happened, people lost jobs.

Uhm, huh (positive). Now at this meeting uhm, were you encouraged to ask questions?

Yeah you could ask questions.

Yeah.

But you know, I didn't ask any.

Okay.

You know cuz.

Well as the process went on were you allowed to, you know, ask questions? Could you talk to anybody about this or? Like your concerns about people losing their jobs could you say anything to anybody?

I, well we just talked you know, co-workers talked among each other. But far as taking it any where higher.

Yeah.

You know I never did.

Okay. Okay. Good Alright so you heard mostly about this from the newspaper, TV coworkers, uh, some things from the higher ups, was there any other communication, you know places you may have heard this about?

No, uh, yeah, actually you know just, you know you could be at the store and people talk about it.

Okay so the community at large. Right?

Yes.

Okay so I bet the community was really you know like your neighbors probably talked to you about it?

Yes. Wherever you went people did talk about it.

Yeah cuz, you know, she was mentioning uh, a meetings that the Pilson Club and some other associations in town held a meeting about the future of the archives.

Yeah but you know I didn't go to, to those meetings uhm.

Okay, well that's good. That's all I needed on that.

APPENDIX G: INTERVIEW 52

Do you consent to being recorded?

Uhm, yes.

Okay. And the first part is I am going to ask you uhm, everything you know about merger, what you remember about the merger of the City and County archives and unfortunately I'm going to be looking away from you cuz I don't want to lead you on. And then I'll, I'll kind of switch to the second part and we'll talk to each other directly. Okay so, my first question again is tell me everything you know about the City and County merger of the archives.

Well uhm, of course it was kind of hard to separate you know the uh, way it was being, you know, sold to, to us, us as citizens and the way it was being sold to us as, as employees, in my case I was an employee of the County government. Uhm, uh, my recollection was the uh, our local uh, the Mayor and the county judge at the time uhm, worked very hard to uhm, promote it. Uhm, and generally they uhm, didn't answer every question as I remember but I think they just basically said that uh, the main thing was to assure people that there wouldn't be uh, layoffs. I think that was the main concern of most uh, uh, city and county employees. Uhm, again during the campaign itself or when the, leading up to the vote, is that what you mean?

Uhm.

Uhm, you know there was no specific uh, well again there were just sort of like these general assurances that uhm, that uh, the people who were involved recognized the importance of the, of the archives and uh, would see to it that uhm, you know, the new facility and the new form that it took, whatever that was, and they weren't, as I remember, very specific that it would uhm, you know, be adequate and uhm, meet the law and, and uh provide an adequate storage space and also uh, an adequate space for uhm, uhm, research and reference for the public and that kind of thing. Uhm, cuz I think that was one of the main things that drove the uhm, this public hearing that I was, that I mentioned to you earlier about uhm, that I think was co-sponsored by the Filson Club and the local genealogical society and the State archives because there were some questions I guess uhm, about what was to become of us. Uhm, but uh, now I don't think the public was generally aware that you had a, that you had one office that was connected to historic preservation and one that was just a, an internal records management and records storage facility of, of its branch of the government. Uhm, and that was the issue that had to be resolved, which model were you going to follow. Uhm, and that I think they just waited until after uhm, after merger was voted in and then just settled on, on the one they did actually follow which was to split off historic preservation and combine the City and County archives into a single primarily records storage facility although we still have

some of our uhm, our uh, genealogy uhm, and public re, or public research and records function which hadn't been a major function of the City archives but was of the old County. Uhm, but then that's, I don't know in terms of the uh, terms of the election itself it's gosh it's been so many years ago. It's amazing how quickly I forget things. Uhm, cuz a lot of the discussions that I can recall were about you know, what was to become of us, actually I think took place after the merger vote took place. Uhm, it was during that year or maybe year and a half actually. It was all of 2002 and maybe into the first half of or first part of 2003. Uhm, and uh, they were still debating it, I think, even into the spring of 2003 if I remember correctly. Uhm, it wasn't until then that they finally decided when they were, I guess, putting the budget together, the new, I guess what would have been the first, full Metro budget that uh, that they decided to go ahead and split off historic preservation uhm, and just create a, a Metro archives that would be modeled mostly along the lines of the old City archives although some remnant of the uh, the uh, public uh, research uhm, ang, or materials that we had that, that we collected as the uh, the old uh, county historic preservation and archives department that we would keep doing that. Uhm, but then you know, for a long time nothing actually changed physically. Uh, there was no place to put us and so for a long time you still had, the County staff was still in one building and the City staff was still in another building. Uhm, and we kind of sailed along. Uhm, it took us a while to uh, start thinking about how we would integrate our record keeping system uhm, and uh, at the same time we were also having to start planning for our move and the uh, incorporation of uhm, our new uh, record keeping system which was a new computer program uhm, which would involve uh, transferring records from the old uhm, computer program that the City had used called Simple. And of course, the County had not been automated in any way so it was, we were totally uh, newly automated at the time that we started using Smeedlink. And then we had to start planning for our move uhm, which took. Course here, we're getting, I'm getting, I'm getting too far forward into the story. Uh, basically we're getting into 2006 I guess when they found this building and determined, we determined that it was big enough to house both facilities uhm, and then we worked with an architectural firm called QK4 and they helped design this space here on the first floor. Uhm, and uhm, fortunately we were, they were able, I guess times were better then, and we were able to buy all the shelving for our new uh, storage space on the third floor which is uh, where the archives is uh, located and where we have our climate controlled storage area. Uhm, and then all the old shelving was used up on the fourth floor. And we're still in the process of, of still straightening out the leftovers of our, of our uh, merger. Because uh, we still had records stored in another building, called Memorial Auditorium, which was the primary location of the City archives. Uh, a lot of material that had been all the permanency records, if I remember, and anything uhm, non permanent that had a disposal date after 2009 we moved here, to our new place, at 635 Industry. Anything that had a 2008 or earlier disposal date we left behind and that's what we were destroying right now. And there were still some uhm, some uh, materials that had been damaged by a flood that were left behind that have to be uhm. I was going through some of them this morning. Uhm, some old plat books that I'm having to create new binders for using cardboard uh, in order to move them because they

had just been left behind in this room uhm, ever since that big flood in the, at Memorial Auditorium. Uhm, but I don't know. Am I wandering here?

It's okay.

APPENDIX H: INTERVIEW 53

What I want to ask you about there is now everyone else is kind of telling me they heard about mergers through the newspaper and TV first. Is that how you heard about merger? You know this, this current one. I know you heard about it in the 80's but there was this.

Yeah it seems to me like there was a merger task force that was put together.

Uhm, huh (positive).

That was primarily created to sort of uh, sell it to the public.

Uhm, huh (positive).

Uhm, there was actually an office in our building over at 810 Barrett where they had all the staff and they had all the documents where you could come and ask questions.

Humh.

If you had about, about merger.

Okay.

Uhm, and uh, you know most of it again were questions, answering questions for the general public.

Uhm, huh (positive).

They really didn't do that for employees.

Okay.

Uhm, largely because I don't think they knew.

Yeah.

Uhm, and people ask questions uh, you know specific like well what's going to happen to us, where are we going to be, what building are we going to be in, blah, blah, blah. Uh, we didn't get specific answers to those questions.

Uhm, huh (positive).

Uh, we were just told that uh, you know it was all gonna work out.

Okay, okay. So, uhm.

At least that's what I remember.

Yeah. Okay. I mean did they have kind of any, well in literature we call them kick off meetings.

Basically they get the higher ups down there and they bring you down and they kind of say here's what's gonna to happen. They'll tell you the vision and they'll say well do you all have any questions about that. Did you have any kind of meetings like that?

Golly Moses.

Yeah.

Isn't that awful I can't remember.

Uhm.

Uhm, I'm sure we must have.

Yeah.

Uhm, I'm sure who would have done it. Yes we did actually cuz uh, Rebecca Jackson was the one who did it. She kind of spear headed that.

Okay.

More than, uh, I guess at least for me. Because uh, at the time, at least for County employees I guess.

Uhm, huh (positive).

And I assume Armstrong did something similar for, for employees of the City government.

Uhm, huh (positive).

Uhm, cuz they both were, like I think where they were co-chairs of the task force.

Right.

Uhm, and I remember she had several meetings, a whole series of meetings during the summer uhm.

Uhm, huh (positive).

In which she uh, talked to uhm, employees uh, about merger. Although again it was very difficult for her to answer specific questions.

Uhm.

Uhm, uhm, other than to say you know, it was a new day has dawned, and the cit.

Okay.

And the citizens have spoken and I think we were all tired of being told to think outside the box. Uh, that's the one thing I guess we do remember from I can't remember whether that came from, from the task force or whether that was something we got from Abramson afterwards. Because it was sort of a seamless process it. You know it started in 2002 and continued on into 2003 and 2004.

Uhm, huh (positive).

And longer. You know, it uh, it wasn't something that you know had a beginning and an like I say for us it's still going on.

Okay, okay. Well, you probably, of course the other ones were talking about they hear most of it from TV, newspaper, co-workers. Okay you had some of those meetings and such. Uhm, and I saw a couple of emails that kind of you know they had a transition task force.

Uhm, huh (positive).

Or something like that. I mean did they have any kind of internal employee communication that way or?

Well, I don't remember it in terms of, of uhm, of how it was going to be sold to the public or to us.

Uhm, huh (positive).

Uhm, other than just it was somehow going to because I think we were all, all, most metro employees were aware of the, of the over lapping functions and the duplications at metro government and a lot of the confusion that resulted from having a, a city and a county that sort of overlapped.

Uhm, huh (positive).

And did some of the same things and shared some things. And you know, we uh, quarreled about other things you know.

Okay.

And we knew that generally it left a lot of the public confused. Not so much for the archives because we're not a service that deals directly with the public.

Right.

We're more of an internal function uhm, of the uh, of the city government.

Uhm, huh (positive).

Uhm but uh, you know I really can't remember a specific vision uh, of what it was going to be like other than it was just going to be more logical, more coherent, more streamlined.

Uhm.

At least that's what I sort of took from the meetings or from the discussions.

Okay.

That uh, all of the confusion over uh, you know the overlapping of city and county government.

Right.

And trying to accomplish any function of local government.

Uhm.

Would somehow be resolved uhm..

Okay.

Again no details.

Yeah.

Uhm, just that once it was done and it became one single unit of government that uh, those things would be resolved. We wouldn't be, probably the one that sticks out in my

mind is economic development for example. We wouldn't be constantly at loggerheads over that.

Uhm.

Uhm, where you've had two competing economic development offices. Uhm, and yet both you know, supposedly serving the, the needs of the same government.

Uhm, that's about, that's about the most of it, that's about the vision that I can remember was just you know, logical coherence of local government uhm, and that citizens uhm, would, would feel, would understand that and, and appreciate that and uh, would be less confused by uh, by what seemed to be uh, you know an incoherent uhm, system that we uh, had before. Uhm, but as far as you know any grand vision about uhm, you know how things would be different or changed as far as you know we as employees of the local government. I don't think they focused on that at all.

Uhm. Okay.

At least I don't remember it.

Okay, great.

APPENDIX I: INTERVIEW 54

Do you verbally consent to be interviewed?

Yes.

Okay good. Okay so my question to you is, uhm, tell me all that you know about the merger of the city and county archives.

Okay. Well as I said, uh, I had just come on in of August 2002 so uh, my memories are, are fairly brief as being with the merger. So merger had already been established when I came on with the city and uh, it was gonna to happen. And uh, they were in preparation to merge. Uh, people were preparing to do that. And uh, there was no doubt about it. Uh, I came on the city and we would go over and uh, first oh, probably September or October 2002 we went over and had some meetings with the county people. That was my first exposure with them. Uh, to kind of line out some meetings that they had already con, were having. To line out on what we might be doing in this merger process. And uh, as I said I was pretty much a novice in this and uh, I really didn't have uh, too much preconceived notions about it. Uh, I had been a person that uh, as a citizen been kind of for it so I had a pretty positive outlook on it. Uh, but I didn't have any outlook on it from the government perspective other than I was ready to get in there with them.

Uh, good.

APPENDIX J: INTERVIEW 55

So when you came on board I guess you had an orientation kind of uhm, training or something like that.

Uh, yes.

Okay and during that did they talk to you about the merger and what kind of vision they had for it or? Was that just?

No, uh, do you mean the City people?

Yes.

I mean the people from the City that did orientation?

Right

Or do you mean the people in my department?

Well more like people from the City that did the orientation training for you?

No they did not.

Okay. But the people in your department did they tell you some more about the merger?

Uh, probably somewhat.

Okay.

Just that uh, we would be merging.

Uhm, huh (positive).

And uh, uh, with the county people, they didn't know how it would go but they knew we that we would have to become one department.

Okay.

And uh, they had no idea how it, it was kind of in the air as to, there was a lot of questions about it.

Uhm, huh (positive).

Because they did not know what department we were gonna be under it, under, who would be in charge.

Uhm. Okay.

It was really, you know, they were probably under a lot of stress themselves. Probably a lot more so than I was.

Yeah.

Because I was uh, more at the bottom of the totem pole.

Okay.

And, and, they were probably feeling a lot more pressure that way.

Well the others had said that they heard you know, when they had questions about the merger they learned more about it from the newspaper and television.

Yeah.

Than they actually did from internal. So I mean did that kind of the same with you?

That would probably be the same way with me too.

And you probably talked to your co-workers a lot about it?

Yeah.

Now usually you know, when they do a change effort in government they usually have a big kick off meeting they get al.l the you know, powers that be.

Yep.

And did you attend any of those kind of meetings?

I think all that preceded my arrival.

Okay, okay.

Uh, by the time that I came it was so close.

Uhm, huh (positive).

Just about four months away.

Uhm.

That I think all the hoopla had already been did. They were at the point where elections were coming up.

Yeah.

For the positions.

Uhm, huh (positive).

And that and the things, every thing else had been established. It was just uh, who were going to be serving in the various alternate positions.

Okay.

Or the metro council positions I should say.

So other than probably television and newspapers and your co-workers was there anywhere else that you heard about merger other than the official channels?

No I don't think so.

One lady mentioned that her neighbors talked to her a lot about that. Did you have that kind of happening to you?

Uh, I don't think we talked too much about it in our neighborhood.

Okay.

Too much.

Okay. So basically when you came on board it was just kind of like this is happening you know.

just hang on we're going.

Deal with it.

Okay, great. Okay, well good. Thank you XXXX.

APPENDIX K: AUTOMAP PREPROCESSING DELETE LIST

a and at for her hers his it me my of our so the theirs they uh umm we whoever whomever would

your yourself

an as but he her him i its mine nor or she that their them to uhm us who whom will you yours

APPENDIX L: MENTAL MODEL 0

Mental model 0 (Before PreProcessing)

Okay. Uhm, local Metro Jefferson County government merged in Janu, on January 6, 2003. Uh, at that time the, there was a county archives, that was really, it was Historic Preservation and Archives I think was the name of the department and on the City side there was department called Department of Archives that was a division of, at that time the Finance department. Uhm, on the County side uh, I think it was a separate department Historic Preservation and Archives. And so when those two departments merged uhm, we, we looked at you know, what was going to be the main function uh, for those groups cuz the function was the function that was taken away out of the County side was the historic preservation part that they would not be responsible for uh, that so we were only taking on the actual uhm, records and retention the historic archives uh, uhm, group for that. So on the County side there were several employees and on the City side there were two or three employees at that time and so what we wanted to look at was how to merge the functions of those groups, the people of those groups and the locations. Uhm, what we did first was we merged the uh, the people uh, in those groups where we had and we named it, a primary supervisor so we took the person who was the primary supervisor for the City archives and moved her to the physical location where the County archives people worked and had her primarily work out of that location uhm, because we, we were in four different locations uh, and I don't know if you want to know those locations but they were at like 810 Barrett Avenue, they were at Global Gardens, Memorial Auditorium and there was a couple different, I think there was one other location where

they had some collection uhm, and so while they physically moved the people we were still had collections in three or four different locations and so that was a challenge for us to overcome that uh, for a long time until we actually physically merged the locations which was done last Janu, January of 2007. So that was, that was kind of the last step. But in the meantime we started merging, uhm, uh, policies and procedures and most of that was done internally within that group. From our standpoint, from the administration side we pretty much left it up to them to determine uh, how they wanted to do it, uh, what they wanted to do and what uh, what they wanted to look at as they started merging. We just gave them the directive or the understanding that they needed to, to merge those groups. Uhm, merge the, merge the policies, start merging the records, uhm, start understanding, cross training people in each group so that the County people started to understand what the City collection had, the City people started to understand what was in the county collection and then to start uhm, so that they could both do those jobs uh, if there, if someone was out for the day or if someone left uh, permanently we would be able, we would be covered there. Uhm, so that was kind of the first step was to get the people working together and then start merging the collections and then again the final step was the, the physical move up to a location that was just completed last year. That was kind of it from a high, from a high level.

Mental model 0 (After PreProcessing)

Okay. xxx local Metro Jefferson County government merge in Janu on January 6 2003. xxx xxx xxx time xxx there be xxx county archive xxx be really xxx be Historic

Preservation xxx Archives xxx think be xxx name xxx xxx department xxx on xxx City side there be department call Department xxx Archives xxx be xxx division xxx xxx xxx time xxx Finance department, xxx on xxx County side xxx xxx think xxx be xxx separate department Historic Preservation xxx Archives, xxx xxx when those two department merge xxx xxx xxx look xxx xxx know what be go xxx be xxx main function xxx xxx those group cuz xxx function be xxx function xxx be take away out xxx xxx County side be xxx historic preservation part xxx xxx be not be responsible xxx xxx xxx xxx xxx be only take on xxx actual xxx record xxx retention xxx historic archive xxx xxx group xxx xxx. xxx on xxx County side there be several employee xxx on xxx City side there be two xxx three employee xxx xxx time xxx xxx what xxx want xxx look xxx be how xxx merge xxx function xxx those group xxx people xxx those group xxx xxx location. xxx what xxx do first be xxx merge xxx xxx xxx people xxx in those group where xxx have xxx xxx name xxx xxx primary supervisor xxx xxx take xxx person xxx be xxx primary supervisor xxx xxx City archive xxx move xxx xxx xxx physical location where xxx County archive people work xxx have xxx primarily work out xxx xxx location xxx because xxx xxx be in four different location xxx xxx xxx dont know if xxx want xxx know those location xxx xxx be xxx like 810 Barrett Avenue xxx be xxx Global Gardens Memorial Auditorium xxx there be xxx couple different xxx think there be one other location where xxx have some collection xxx xxx xxx while xxx physically move xxx people xxx be still have collection in three xxx four different location xxx xxx xxx be xxx challenge xxx xxx xxx overcome xxx xxx xxx xxx long time until xxx actually physically merge xxx location which be do last Janu January xxx 2007. xxx xxx be xxx be kind xxx

most xxx xxx be do internally within xxx group. From xxx standpoint from xxx administration side xxx pretty much leave xxx up xxx xxx xxx determine xxx how xxx want xxx do xxx xxx what xxx want xxx do xxx what xxx what xxx want xxx look xxx xxx xxx start merge. xxx just give xxx xxx directive xxx xxx understand xxx xxx need xxx xxx merge those group. xxx merge xxx merge xxx policy start merge xxx record xxx start understand cross train people in each group xxx xxx xxx County people start xxx understand what xxx City collection have xxx City people start xxx understand what be in xxx county collection xxx then xxx start xxx xxx xxx xxx could both do those job xxx if there if someone be out xxx xxx day xxx if someone leave xxx permanently xxx be be able xxx be be cover there. xxx xxx xxx xxx be kind xxx xxx first step be xxx get xxx people work together xxx then start merge xxx collection xxx then again xxx final step be xxx xxx xxx physical move xxx xxx xxx location xxx be just complete last year. xxx be kind xxx xxx from xxx high from xxx high level.

APPENDIX M: MENTAL MODEL 1

Mental model 1 (Before PreProcessing)

Well what I thought it would mean would be that uhm, they would find a place that would be suitable for all of the old City archives holdings and their offices and our offices cuz I used to work for the old City and the new Metro would also you know, realize that we needed a place big enough so that the old County archives could all be in one, one location. And, and I thought that was a good thing. Because uhm, over the years you know people would, who, who would call us or would come out to look at records they would think that we had records that we didn't have and then I'd have to direct them to go over to the old County location then vice versa people would go over there looking for stuff that maybe we had at the City. So we always knew that it would be a good thing if we could combine the two because for the citizens and the people who do research they could come to one place and find what they needed instead of having go two separate places to do the research on anything that happened in Jefferson County government. It was always described very ambiguously. Because, because they, they never really knew where they were gonna put us. And so that was always the big question. Where are, what, what facility, what building could we possibly use uhm, that would accommodate both of these separate archives, their holdings. Uhm, and you have to realize that the old city was at Memorial Auditorium which had quite a bit of uhm, uh, storage area in the basement. But we had had floods in that basement previous to merger. So I, I always liked the idea of getting up out of the basement. Uhm, the old County had moved quite a few times. They were at 810 Barrett but yet they had their non permanent stuff still stored down in

the basement of Louisville Gordons. So what was very interesting to me was I was hearing more conversation outside of government about where we should go from people who were interested in seeing that the archives got a good place to be moved to. Uhm, we, we had people just calling us from the outside and saying stuff to us that internally people weren't discussing that with us. So that was kind of strange. That, that you had people from the outside that didn't have even any positions, these people weren't, weren't metro government employees you see what I'm saying. They were people from the outside who were very interested in we even had people from the state archives calling us and discussing well do you know where you're gonna go, do you know where the, where, where all your holdings are gonna be moved to? And we, we, we would always say well no ones informed us of where we're going. So, uhm, I thought that was extremely strange that we didn't have people internally telling us stuff or asking us stuff. We just, we just had people from the outside making, making all these, these moves and setting up moves to discuss it. Uhm, cuz there was a meeting at one point early on after, well it might have been in 2002 actually before merger was actually uh, actually happened in January 2003 that there was a meeting that was held at the Brown Hotel and, and these were concerned people, you know uhm, educated people mostly who, who, who were just concerned about where the archives was going to, to be relocated to. And they came up with strategies but and they submitted them to, to, to the powers that be at Metro government but it didn't do any good because from that meeting they actually suggested that Louisville Gardens be used and, and the reason why they wanted to use

Louisville Gardens because it was so centrally located but the powers that be didn't. I don't think they took that suggestion very seriously.

Mental model 1 (After PreProcessing)

Well what xxx think xxx be mean be be xxx xxx xxx be find xxx place xxx be be suitable xxx all xxx xxx old City archive holding xxx xxx office xxx xxx office cuz xxx use xxx work xxx xxx old City xxx xxx new Metro be also xxx know realize xxx xxx need xxx place big enough xxx xxx xxx old County archive could all be in one one location. xxx xxx xxx think xxx be xxx good xxx. Because xxx over xxx year xxx know people be xxx xxx be call xxx xxx be come out xxx look xxx record xxx be think xxx xxx have record xxx xxx didnt have xxx then Id have xxx direct xxx xxx go over xxx xxx old County location then vice versa people be go over there look xxx stuff xxx maybe xxx have xxx xxx City. xxx xxx always know xxx xxx be be xxx good xxx if xxx could combine xxx two because xxx xxx citizen xxx xxx people xxx do research xxx could come xxx one place xxx find what xxx need instead xxx have go two separate place xxx do xxx research on anything xxx happen in Jefferson County government. xxx be always describe very ambiguously. Because because xxx xxx never really know where xxx be gonna put xxx. xxx xxx xxx be always xxx big question. Where be what what facility what build could xxx possibly use xxx xxx be accommodate both xxx these separate archive xxx holding. xxx xxx xxx have xxx realize xxx xxx old city be xxx Memorial Auditorium which have quite xxx bite xxx xxx xxx storage area in xxx basement. xxx xxx have have flood in xxx basement previous xxx merger. xxx xxx xxx always like xxx idea xxx get up out xxx xxx

basement. xxx xxx old County have move quite xxx few time. xxx be xxx 810 Barrett xxx yet xxx have xxx non permanent stuff still store down in xxx basement xxx Louisville Gordons. xxx what be very interest xxx xxx be xxx be hear more conversation outside xxx government about where xxx should go from people xxx be interest in see xxx xxx archive get xxx good place xxx be move xxx. xxx xxx xxx have people just call xxx from xxx outside xxx say stuff xxx xxx xxx internally people werent discuss xxx with xxx. xxx xxx be kind xxx strange. xxx xxx xxx have people from xxx outside xxx didnt have even any position these people werent werent metro government employee xxx see what Im say, xxx be people from xxx outside xxx be very interest in xxx even have people from xxx state archive call xxx xxx discuss well do xxx know where youre gonna go do xxx know where xxx where where all xxx holding be gonna be move xxx. xxx xxx xxx xxx be always say well no one inform xxx xxx where be go. xxx xxx xxx think xxx be extremely strange xxx xxx didnt have people internally tell xxx stuff xxx ask xxx stuff. xxx just xxx just have people from xxx outside make make all these these move xxx set up move xxx discuss xxx. xxx cuz there be xxx meet xxx one point early on after well xxx might have be in 2002 actually before merger be actually xxx actually happen in January 2003 xxx there be xxx meet xxx be hold xxx xxx Brown Hotel xxx xxx these be concern people xxx know xxx educate people mostly xxx xxx xxx be just concern about where xxx archive be go xxx xxx be relocate xxx. xxx xxx come up with strategy xxx xxx xxx submit xxx xxx xxx xxx xxx power xxx be xxx Metro government xxx xxx didnt do any good because from xxx meet xxx actually suggest xxx Louisville Gardens be use xxx xxx xxx reason why xxx want xxx use Louisville Gardens because

xxx be xxx centrally locate xxx xxx power xxx be didnt. xxx dont think xxx take xxx suggestion very seriously.

APPENDIX N: MENTAL MODEL 2

Mental model 2 (Before PreProcessing)

I first heard of the merger from the TV, the media. And they had been wanting it, I think, several years before that. And then when it, when it all came about the way we was supposed to, we was just supposed to become one, one group. And that's all I know.

Mental model 2 (After PreProcessing)

xxx first hear xxx xxx merger from xxx TV xxx media. xxx xxx have be want xxx xxx think several year before xxx. xxx then when xxx when xxx all come about xxx way xxx be suppose xxx xxx be just suppose xxx become one one group. xxx xxx all xxx know.

APPENDIX O: MENTAL MODEL 3

Mental model 3 (Before PreProcessing)

Well uhm, of course it was kind of hard to separate you know the uh, way it was being, you know, sold to, to us, us as citizens and the way it was being sold to us as, as employees, in my case I was an employee of the County government. Uhm, uh, my recollection was the uh, our local uh, the Mayor and the county judge at the time uhm, worked very hard to uhm, promote it. Uhm, and generally they uhm, didn't answer every question as I remember but I think they just basically said that uh, the main thing was to assure people that there wouldn't be uh, layoffs. I think that was the main concern of most uh, uh, city and county employees. Uhm, again during the campaign itself or when the, leading up to the vote, is that what you mean? Uhm, you know there was no specific uh, well again there were just sort of like these general assurances that uhm, that uh, the people who were involved recognized the importance of the, of the archives and uh, would see to it that uhm, you know, the new facility and the new form that it took, whatever that was, and they weren't, as I remember, very specific that it would uhm, you know, be adequate and uhm, meet the law and, and uh provide an adequate storage space and also uh, an adequate space for uhm, uhm, research and reference for the public and that kind of thing. Uhm, cuz I think that was one of the main things that drove the uhm, this public hearing that I was, that I mentioned to you earlier about uhm, that I think was co-sponsored by the Filson Club and the local genealogical society and the State archives because there were some questions I guess uhm, about what was to become of us. Uhm, but uh, now I don't think the public was generally aware that you had a, that you had one

office that was connected to historic preservation and one that was just a, an internal records management and records storage facility of, of its branch of the government. Uhm, and that was the issue that had to be resolved, which model were you going to follow. Uhm, and that I think they just waited until after uhm, after merger was voted in and then just settled on, on the one they did actually follow which was to split off historic preservation and combine the City and County archives into a single primarily records storage facility although we still have some of our uhm, our uh, genealogy uhm, and public re, or public research and records function which hadn't been a major function of the City archives but was of the old County. Uhm, but then that's, I don't know in terms of the uh, terms of the election itself it's gosh it's been so many years ago. It's amazing how quickly I forget things. Uhm, cuz a lot of the discussions that I can recall were about you know, what was to become of us, actually I think took place after the merger vote took place. Uhm, it was during that year or maybe year and a half actually. It was all of 2002 and maybe into the first half of or first part of 2003. Uhm, and uh, they were still debating it, I think, even into the spring of 2003 if I remember correctly. Uhm, it wasn't until then that they finally decided when they were, I guess, putting the budget together, the new, I guess what would have been the first, full Metro budget that uh, that they decided to go ahead and split off historic preservation uhm, and just create a, a Metro archives that would be modeled mostly along the lines of the old City archives although some remnant of the uh, the uh, public uh, research uhm, ang, or materials that we had that, that we collected as the uh, the old uh, county historic preservation and archives department that we would keep doing that. Uhm, but then you know, for a long time

nothing actually changed physically. Uh, there was no place to put us and so for a long time you still had, the County staff was still in one building and the City staff was still in another building. Uhm, and we kind of sailed along. Uhm, it took us a while to uh, start thinking about how we would integrate our record keeping system uhm, and uh, at the same time we were also having to start planning for our move and the uh, incorporation of uhm, our new uh, record keeping system which was a new computer program uhm, which would involve uh, transferring records from the old uhm, computer program that the City had used called Simple. And of course, the County had not been automated in any way so it was, we were totally uh, newly automated at the time that we started using Smeedlink. And then we had to start planning for our move uhm, which took. Course here, we're getting, I'm getting too far forward into the story. Uh, basically we're getting into 2006 I guess when they found this building and determined, we determined that it was big enough to house both facilities uhm, and then we worked with an architectural firm called QK4 and they helped design this space here on the first floor. Uhm, and uhm, fortunately we were, they were able, I guess times were better then, and we were able to buy all the shelving for our new uh, storage space on the third floor which is uh, where the archives is uh, located and where we have our climate controlled storage area. Uhm, and then all the old shelving was used up on the fourth floor. And we're still in the process of, of still straightening out the leftovers of our, of our uh, merger. Because uh, we still had records stored in another building, called Memorial Auditorium, which was the primary location of the City archives. Uh, a lot of material that had been all the permanency records, if I remember, and anything uhm, non

permanent that had a disposal date after 2009 we moved here, to our new place, at 635 Industry. Anything that had a 2008 or earlier disposal date we left behind and that's what we were destroying right now. And there were still some uhm, some uh, materials that had been damaged by a flood that were left behind that have to be uhm. I was going through some of them this morning. Uhm, some old plat books that I'm having to create new binders for using cardboard uh, in order to move them because they had just been left behind in this room uhm, ever since that big flood in the, at Memorial Auditorium. Uhm, but I don't know. Am I wandering here?

Mental model 3 (After PreProcessing)

whatever xxx be xxx xxx werent xxx xxx remember very specific xxx xxx be xxx xxx know be adequate xxx xxx meet xxx law xxx xxx xxx provide xxx adequate storage space xxx also xxx xxx adequate space xxx xxx xxx research xxx reference xxx xxx public xxx xxx kind xxx xxx. xxx cuz xxx think xxx be one xxx xxx main thing xxx drive xxx xxx this public hear xxx xxx be xxx xxx mention xxx xxx earlier about xxx xxx xxx think be cosponsor by xxx Filson Club xxx xxx local genealogical society xxx xxx State archive because there be some question xxx guess xxx about what be xxx become xxx xxx. xxx xxx xxx now xxx dont think xxx public be generally aware xxx xxx have xxx xxx xxx have one office xxx be connect xxx historic preservation xxx one xxx be just xxx xxx internal record management xxx record storage facility xxx xxx xxx branch xxx xxx government. xxx xxx xxx be xxx issue xxx have xxx be resolve which model be xxx go xxx follow. xxx xxx xxx xxx think xxx just waite until after xxx after merger be vote in xxx then just settle on on xxx one xxx do actually follow which be xxx split off historic preservation xxx combine xxx City xxx County archive into xxx single primarily record storage facility although xxx still have some xxx xxx xxx xxx xxx genealogy xxx xxx public re xxx public research xxx record function which hadnt be xxx major function xxx xxx City archive xxx be xxx xxx old County. xxx xxx then xxx xxx dont know in term xxx xxx xxx term xxx xxx election itself xxx gosh xxx be xxx many year ago. xxx amaze how quickly xxx forget thing. xxx cuz xxx lot xxx xxx discussion xxx xxx can recall be about xxx know what be xxx become xxx xxx actually xxx think take place after xxx merger vote take place. xxx xxx be during xxx year xxx maybe year xxx xxx half actually. xxx be all xxx 2002 xxx maybe into xxx first half xxx xxx first part xxx 2003.

xxx xxx xxx xxx be still debate xxx xxx think even into xxx spring xxx 2003 if xxx remember correctly, xxx xxx wasnt until then xxx xxx finally decide when xxx be xxx guess putt xxx budget together xxx new xxx guess what be have be xxx first full Metro budget xxx xxx xxx xxx decide xxx go ahead xxx split off historic preservation xxx xxx just create xxx xxx Metro archive xxx be be model mostly along xxx line xxx xxx old City archive although some remnant xxx xxx xxx xxx xxx public xxx research xxx ang xxx material xxx xxx have xxx xxx xxx collect xxx xxx xxx xxx old xxx county historic preservation xxx archive department xxx xxx be keep do xxx, xxx xxx then xxx know xxx xxx long time nothing actually change physically. xxx there be no place xxx put xxx xxx xxx xxx xxx long time xxx still have xxx County staff be still in one build xxx xxx City staff be still in another build. xxx xxx xxx kind xxx sail along. xxx xxx take xxx xxx while xxx xxx start think about how xxx be integrate xxx record keep system xxx xxx xxx xxx xxx same time xxx be also have xxx start plan xxx xxx move xxx xxx xxx incorporation xxx xxx xxx new xxx record keep system which be xxx new computer program xxx which be involve xxx transfer record from xxx old xxx computer program xxx xxx City have use call Simple. xxx xxx course xxx County have not be automate in any way xxx xxx be xxx be totally xxx newly automate xxx xxx time xxx xxx start use Smeedlink. xxx then xxx have xxx start plan xxx xxx move xxx which take. Course here be get Im get Im get too far forward into xxx story. xxx basically be get into 2006 xxx guess when xxx find this build xxx determine xxx determine xxx xxx be big enough xxx house both facility xxx xxx then xxx work with xxx architectural firm call QK4 xxx xxx help design this space here on xxx first floor. xxx xxx xxx fortunately xxx be xxx be able

xxx guess time be better then xxx xxx be able xxx buy all xxx shelve xxx xxx new xxx storage space on xxx third floor which be xxx where xxx archive be xxx locate xxx where xxx have xxx climate control storage area. xxx xxx then all xxx old shelve be use up on xxx fourth floor. xxx be still in xxx process xxx xxx still straighten out xxx leftover xxx xxx xxx xxx xxx merger. Because xxx xxx still have record store in another build call Memorial Auditorium which be xxx primary location xxx xxx City archive. xxx xxx lot xxx material xxx have be all xxx permanency record if xxx remember xxx anything xxx non permanent xxx have xxx disposal date after 2009 xxx move here xxx xxx new place xxx 635 Industry. Anything xxx have xxx 2008 xxx earlier disposal date xxx leave behind xxx xxx what xxx be destroy right now. xxx there be still some xxx some xxx material xxx have be damage by xxx flood xxx be leave behind xxx have xxx be xxx. xxx be go through some xxx xxx this morn. xxx some old plat book xxx Im have xxx create new binder xxx use cardboard xxx in order xxx move xxx because xxx have just be leave behind in this room xxx ever since xxx big flood in xxx xxx Memorial Auditorium. xxx xxx xxx dont know. Am xxx wander here.

APPENDIX P: MENTAL MODEL 4

Mental model 4 (Before PreProcessing)

Okay. Well as I said, uh, I had just come on in of August 2002 so uh, my memories are, are fairly brief as being with the merger. So merger had already been established when I came on with the city and uh, it was gonna to happen. And uh, they were in preparation to merge. Uh, people were preparing to do that. And uh, there was no doubt about it. Uh, I came on the city and we would go over and uh, first oh, probably September or October 2002 we went over and had some meetings with the county people. That was my first exposure with them. Uh, to kind of line out some meetings that they had already con, were having. To line out on what we might be doing in this merger process. And uh, as I said I was pretty much a novice in this and uh, I really didn't have uh, too much preconceived notions about it. Uh, I had been a person that uh, as a citizen been kind of for it so I had a pretty positive outlook on it. Uh, but I didn't have any outlook on it from the government perspective other than I was ready to get in there with them.

Mental model 4 (After PreProcessing)

Okay. Well xxx xxx say xxx xxx have just come on in xxx August 2002 xxx xxx xxx memory be be fairly brief xxx bee with xxx merger. xxx merger have already be establish when xxx come on with xxx city xxx xxx xxx be gonna xxx happen. xxx xxx xxx be in preparation xxx merge. xxx people be prepare xxx do xxx. xxx xxx there be no doubt about xxx. xxx xxx come on xxx city xxx xxx be go over xxx xxx first oh probably September xxx October 2002 xxx go over xxx have some meeting with xxx county

people. xxx be xxx first exposure with xxx. xxx xxx kind xxx line out some meeting xxx xxx have already con be have. xxx line out on what xxx might be do in this merger process. xxx xxx xxx xxx xxx xxx say xxx be pretty much xxx novice in this xxx xxx xxx really didnt have xxx too much preconceive notion about xxx. xxx xxx have be xxx person xxx xxx xxx xxx xxx citizen be kind xxx xxx xxx xxx xxx xxx have xxx pretty positive outlook on xxx. xxx xxx xxx xxx didnt have any outlook on xxx from xxx government perspective other than xxx be ready xxx get in there with xxx.

APPENDIX Q: EMAIL FROM MAYOR'S OFFICE CONCERNING THE MERGER

XXXXXX

From: XXXXXXX

Sent: Wednesday, December 18, 2002 11:06 AM

To: Everyone

Subject: Important Transition News

Importance: High

Below is a letter from the Mayor -Elect to all the employees of City and County Government. You can find this letter as well as other merger related information on the Intranet. http://icintranet Keep your browsers pointed to this site for any additional news from the Mayor's Transition Office as it becomes available.

Thank You

Ramon Padilla Jr.

Jefferson County IS Administrator

Letter from the Mayor Elect..

Dear Fellow Louisville Metro Employees,

As we approach January 6,1 know you must be concerned about the inevitable changes ahead. Be assured, my transition team and I have been working diligently to minimize disruptions and provide a smooth transition for all of the employees of our new government.

We have spoken with numerous department heads and human resource advisors, and are considering many of the issues we know are important to you. As you know, several differences exist in benefits, holidays and other personnel matters. We will be making decisions on these various issues in the near future.

We have opened this employee intranet site to provide everyone with a uniform source of information during the transition. You also will find some interesting Frequently Asked Questions (FAQ) about merger as well as recent announcements that have been made by the Metro Transition Office. You can continue to check this site on a regular basis to stay informed on all new announcements and initiatives that may affect you in the weeks ahead. Department directors have been asked to post information from this site for those employees who do not have access to the intranet.

Together we are embarking on a journey, a journey that no other community our size has undertaken in more than 30 years. There are no road maps for what we are doing and where we

are going, and no guidebooks to ease the way. But, we are now in a position to provide excellent service to our friends and neighbors in Louisville in a consistent and efficient way that has not been possible in the years past.

None of our dreams and goals, however, will be achieved without the help and cooperation of each and every one of you. To that end, we will do our best to keep you well informed all through the process.

I wish all of you a safe and happy holiday season.

Jerry Abramson, Mayor-elect Louisville-Jefferson County Metro Government

APPENDIX R: MERGER FAQ (RETRIEVED OFF THE INTRANET)

As Jerry Abramson campaigned for Metro Mayor, he met weekly with residents in each of the 26 new metro council districts during his "District Dialogues with Jerry." During the dialogues, Mayor-elect Abramson answered a variety of questions, ranging from drainage and traffic problems to safety and economic development. He also addressed a variety of questions that residents had about the operation of the new metro government. In an effort to continue the dialogue about some issues of interest to you and the community, we're reprinting some of the more frequently asked questions and Mayor-elect Abramson's responses from those community sessions.

Frequently Asked Questions

1) How long do you really think it will take to merge governments? Indianapolis voted to merge some 30 years ago and they still haven't merged some departments, including police. This is what I can tell you. Over the last several months, I put together a number of brainstorming and issues groups designed to help me prioritize those areas and departments where we may be able to merge sooner rather later. I want to be able to act come January 6. For example, I think the police departments should merge as soon as possible. You may have read that we initiated a search for a new police chief. We have three finalists to lead what will be one of the largest municipal police forces in America. I expect to make an announcement about the new chief by the end of the year. Human Resources and Finance are two additional areas where I think we can make great strides quickly, maybe within the first month. But I want to stress that if we simply merge departments without taking the time and applying the talent to actually re-invent the way we approach these tactics then we will have made a huge mistake. The mayor of Kansas City, Kansas in Wyandotte County, which is the most recent city and county to merge, told me that to get on the right track we need to make bold changes in the first sk months. He pointed out that he waited a year to close some garages that needed closing and by the time he got to it, everyone involved had "dug in their heels" on one side of the issue or the other, making it a tough sell indeed. He encouraged me to do what needs to be done right

away. Should the decision need to be amended later, it certainly can be. But the window for bold change is very small. I intend to follow his advice and get to work day one.

2) What will happen with regard to the differing tax structures for city and county?

I feel confident that we will be able to continue with our current tax structure, unless and until the metro council changes it. Under merger, taxes and services do not change unless the Metro Council votes to change them. I hope we can find ways to improve services and save money. There is no doubt that we will need to save money in some areas in order to pay the certain expenses of getting some department systems unified. For example, our city and county police departments' cars use different communications equipment that doesn't allow them to talk to each other. When the departments merge, they will have to be able to talk to each other. Our two personnel departments have different software on their computers. It could take as much as \$400,000 to change one personnel department over to the software of the other one. Yes, we need to find savings wherever we can because there will be some initial start up costs that we will need to absorb.

3) Will city and county pay scales become the same?

Pay parity is an issue that needs to be dealt with throughout all government employee classifications and departments. I think parity is essential for running an effective and efficient government, but it needs to be achieved in the context of available monies and budget constraints. Yes, we've found a parity solution for our police departments, but that represents only about 10 percent of our nearly 7,000 government employees. You can be sure that all groups of employees from public works to administrative to other public safety categories, including fire and EMS, will all be looking for ways to bring their respective pay scales into alignment. At the same time, the new government is projected to experience some serious shortfalls. So, we have to take this opportunity of merging our two governments to look at ways to streamline our operations. We may have to start new

people at a different salary level than those already employed in local government. We'll have to look at the possibility of outsourcing some work by paying private companies that might be able to do the job more cost efficiently. There is any number of employment considerations and pay parity will have to be part of that mix of issues.

4) Attracting knowledge workers is an issue. Are you in favor of merging technology departments of the local governments?

Clearly, technology is a very important and valuable tool in government today. I already have a "technology brainstorming group" evaluating our current governments' resources and assessing what kinds of new developments we will need as we move ferward with our new government. If elected, I want to be ready to offer our residents and businesses a number of services "on-line" including things like business permitting and requests for inspections. I see our need for technological advancement growing and developing. However, I'm not prepared to say at this point how we will choose to handle all of our opportunities. I will look to acknowledged experts in computer technology to provide advice on how to best address computer technology needs in the mergsd government.

The recent Brookings Institution report pointed out that Louisville hasn't done well compared to other cities in e'ducational attainment. We have fewer residents with high school and college degrees than do many other cities. On a more positive note, 75 percent of our region's residents live in Louisville and Jefferson County, where 80 percent of the region's jobs are located. The Brookings Report cites trends, such as the fact that more people are moving away from the heart of the city and that traffic and congestion are becoming problems. It also highlights several other areas of concern that we need to address. Regarding our reported trends in education, I would have to say that as Metro Mayor, I would be very much in favor of establishing a Department of Education and Workforce Development Not only will this concentrated effort make us better advocates for education and workforce development, it will provide lifelong learning opportunities. We should be able to provide a seamless opportunity for children to go from Fairdale to a

community college or university, if that's what they want. We also need to create jobs that attract young people and that keep them here.

5) How will you save money in this new government?

Saving money is a critical concern since it has been projected that we are going to enter this new government in a deficit position. Short term, I think we have the opportunity to be more cost efficient in the way we conduct the government's business. For example, our aldermen and county commissioners currently have multiple staffers and I think we can see real savings by limiting each council member to one assistant since their constituencies are now smaller. I think we also will see real savings through the consolidation of services, which can increase our economies of scale. We can save money by consolidating the maintenance of all government-owned vehicles, for instance. No matter what, we must be vigilant because we will have to live within the means of what monies we have.

6) Will we have fewer employees with a smaller payroll under merged government?

The game plan is to create efficiencies and avoid duplications. On Day One, however, we will have two of everything. You can be sure, however, I will be making proposals to the Council to merge certain departments and explore outsourcing some services. As we approach this new government, we cannot accept anything as a given. We have to take full advantage of every opportunity to figure out how to provide the same or better service with less expense. The goal is that by next fiscal year (July 1, 2003), we will have a budget that will outline the initial areas of consolidation and show how we can be more effective and cost efficient with less money.

7) Any plans to extend Operation Brightside to the county?

Yes. I want to take Operation Brightside countywide. We raised some private money toward the end of my last term and it my understanding that money is still mere and can be used to bring "Bright Sites" to areas of the county that need them. While we can create the beauty and upgrade areas, we need neighborhood cooperation to make it a lasting part of landscape. The neighborhood becomes responsible for maintenance weeding and watering. Not only does this give us a more beautiful community, but it also creates a sense of pride in our ability to work together to make things better for all

APPENDIX S: MEETING DOCUMENT FROM FORUM ON METRO ARCHIVES MERGER HELD BY THIRD-PARTY STAKEHOLDERS

MERGERFORUM October 30,2001

AN OUTLINE FOR INFORMATION, CONSIDERATION AND ACTION

AUTHORITY/MANDATE: FEDERAL, STATE, AND LOCAL LAWS GOVERNING

RECORDS MAINTENANCE, or who ultimately tells public records repositories what
records are (computer disks, paper, film, photos, hard drives, publications, reports, etc.),
what to do with them, where, how long each group of them needs to be maintained, how
to dispose of them properly, and which of them must be transferred into a permanent
collection.

- How "records" are defined by law
- The Records Retention and Disposal Schedules for the City and the County
- The role of the State Archives and Records Commission in the maintenance and disposition of public records

CURRENT ADMINISTRATIVE CONFIGURATIONS

• City Archives - Staffing: IV? years ago there were 5 permanent, full-time positions, including a person provided from the Transition Pool One year ago there were 4 permanent, full-time positions, including the person provided by the Transition Pool. Today there are 2 full-time positions, including one provided by the Transition Pool There is no archivist on staff, no clerical help, and the only work that can be done with the existing staff involves responding to

approximately 2,500 information requests received per year.

City Archives is an agency of the Finance Department

• County Archives - Staffing: 2 full-time positions, with little ability to schedule records or process them into the County's collection There is no one to do date-entry, to accommodate retrieval services, nor to update the Records Retention and Disposition Schedule.

County Archives is a part of the Office of Historic Preservation and Archives SPACE OCCUPIED

• City Archives - Full at the present time, with 20,000+ cubic feet, 50% of which are to be held permanently. Currently, the City has no more capacity for growth in its archival or its non-permanent collections. Records, which cannot be, filed on shelves rest in boxes stacked on pallets in the Records Center, regardless of their long-term value.

The cubic feet of records now in City Archives that can be destroyed irr

- 1. 2002 = 831
- 2. 2003 = 1033
- $3. \quad 2004 = 795$
- County Archives 9,456 cubic feet, 81% of which are permanent

 Currently, the County can provide 3 years' growth in its archival collection

 County Archives maintains its non-permanent records collection in the basement of

 Louisville Gardens, which has additional room for growth, depending upon how the

 available space is allocated to agencies.

SYSTEMS FOR TRACKING RECORDS - how do you know what is where, who sent it, how long it has been there, when it can be destroyed, or when it must be accessioned into the archives.

- City Archives Computerized a product called Simple, but which has considerable paper-based backups
- County Archives manual
 "SUNSETTING" BOTH CITY AND COUNTY ARCHIVES NON-PERMANENT
 RECORDS
- Staff requirements, based on current rate of information requests, accessions, destructions, and archival processing only to the extent of categorizing permanent records as such (with a basic group description) in the Simple computer program.
- 1. City need 4 people at a minimum, including a qualified records manager and/or archivist, a records center clerk, an office clerk, and a qualified, experienced Executive Administrator.
- 2. County need 4 people at a minimum, especially to create the finding aids and a database for the overwhelming percentage of records in the collection that are archival.

The new, merged archives will need a minimum of 8 persons to fill the mandates for records-keeping required by statute. Records under the new government will have to be scheduled immediately. (NOTE: Five (5) years were required for the revision of only the City's Retention and Disposition Schedule, when the staff complement was five persons.

The merged government's agencies will not know what records they need to keep, and for how long, without professional staff resources allocated to this task).

RECOMMENDATIONS FOR THE CREATION OF THE METRO ARCHIVES AND RECORDS CENTER

- Create a new entity, merging staff from City and County, with duties to be determined, based upon the success of recruitment efforts in needed areas of expertise.
- Create a new finding aid system for incoming records from the new government, perhaps based initially upon the City's Simple system.
- Find a suitable location for the new entity, with proper environmental conditions, including security, plus shelving.
- Create a vehicle for promoting the work of Chy Archives, County Archives and the newly merged entity. Archivists and Records Managers need advocates. A public relations campaign aimed at current and potential office-holders and the public would be beneficial. The Filson's success in this area might be part of a model.
- Lobby for the administrative placement of the Archives and Records functions in the offices of the Mayor and County Judge until merger, and then as an adjunct of the Mayor's Office. Other administrative models have not been successful largely because the agencies responsible for the archives function over the years did not share the same mission, nor the same goals and objectives as the archives, with unfortunate results (reduction in budget al.locations, departmental authorities'

unresponsiveness to requests to handle concerns, unwillingness to fill position vacancies, etc). When these models worked for both the City and the County in the past largely depended upon the individuals heading the agency with oversight responsibilities for archival functions. The archives flourished when the administrators understood the value of the agencies, and suffered when they did not. After all, top management is the source of the majority of the records being accounted for and permanently preserved. A professional archives and records management staff should not need much supervision in the new government, as indeed they have not needed in either the City of the County hi the past. Their mission, goals, and objectives are already defined and clear.

CURRICULUM VITAE

Education

Ph.D. Public Policy and Administration (Anticipated 2009)

Walden University – Minneapolis, MN

Specializations: Nonprofit Management and Knowledge Management

Dissertation Topic: The Affect of Mental Models on Creating Organizational Alignment

around a Change Vision

Masters of Business Administration (2002)

Jones International University – Englewood, CO

Specialization: Project Management

Masters of Arts in Political Management (1996)

George Washington University – Washington, DC

Specialization: Political Campaign Management / Issue Campaign Management

Bachelor of Arts in Speech Communication / Paralegal Science (1990)

Eastern Kentucky University – Richmond, KY

Publications

"A proposed framework for analyzing organizational failure". Proceedings of the

International Conference of Applied Management and Decision Sciences, 2005.

Presentations

"Project Risk Management: Planning for the Unexpected" Regional Business Exposition 2007, Louisville, Kentucky (March 28, 2007)

"Teaching Public Administration through Blended Learning" APSA Teaching and Learning Conference, Charlotte, North Carolina (February 9-11, 2007)

"Personal Knowledge Management System for Faculty and Students" Celebration of Teaching and Learning, Louisville, KY (October 20, 2006)

"Personal Knowledge Management System for Students" Kentucky Communication Association, Cumberland Falls State Resort Part, KY (September 22-23, 2006)

"Knowledge Management Concepts for the Government Project Management Office" Walden University Doctoral Student Research Conference, Bloomington, IN (July 15, 2005)

"A Proposed Framework for Analyzing Organizational Failure" International Conference on Applied Management and Decisions Sciences, Athens, GA (January 23-24, 2005)

Teaching Experience

<u>University of Louisville</u> (Louisville, Kentucky) 2000 to Present

Instructor of Computer Communication

Cover three main topics in this introductory course: using Office applications, effective online research, and developing basic websites. Course designed to use active learning concepts such as problem-based learning, incentive-based grading, and team-based learning in addition to traditional lecture. The course is a blended model in that Blackboard is used to supplement the in-class activities.

Instructor of Web Development

Instruct students each semester in the planning, design and construction of websites.

Course designed to use active learning concepts such as problem-based learning, incentive-based grading, and team-based learning in addition to traditional lecture. The course is a blended model in that Blackboard is used to supplement the in-class activities. Have also taught independent studies for students who want to expand on the concepts taught in this course. For example, I taught an independent study in which the student

Courses Taught:

Comm 250 – Computer Communication

learned to produce digital video for websites.

Comm 360 – Website Development

Comm 380 – Practicum (Online Health Communication – co-instructor)

Comm 401 – Advanced Web Design and CSS Coding

Jones International University (Accredited Online University) 2004-Present

Instructor in Project Management

Manage online course in project management. Review and grade student assignments, facilitate online discussions, and augment course with relevant professional experiences and literature. Project management subject matter expert for Jones International University's certification as a Project Management Institute Registered Education Provider. Customized project management courses for Mexican Federal Government.

Courses Taught

MBA 571 – The Project Management Framework

MBA 572 – Planning Projects to Manage Outcomes

MBA 573 – Project Controls and Tracking Project Progress

MBA 574 – Strategic Thinking and Project Management

MBA 580 – Capstone (Advised student who developed a streamlined project management methodology for small information technology projects)

Professional Experience

Human Resources Specialist

U.S. Office of Personnel Management

Perform analysis of compensation issues involving locality pay and special rates.

Project Manager/Developer

Technology Consulting, Inc. (Louisville, Kentucky) 2001 – 2003

Project lead for four separate projects: delegated work to five developers, prepared cost reports and status reports for clients (using EVA); substantial client and stakeholder management.

Web Programmer

Digicove (Jeffersonville, Indiana) 2000 – 2001

Developed and programmed database applications for over 40 ecommerce websites.

Lead Developer on two interactive sports games for the local Fox Television affiliate

Computer Technician

Jefferson County Property Valuation Administration (Louisville, Kentucky) 1999 – 2000 Created reports (using Crystal Reports and Office 2000) and maintained the main property parcel database (housed on SQL Server 6.5/7.0). Created smaller end-user Access applications for various departments. Provided technical support for the PVA modem service and help-desk duties involving Microsoft Office software.

Program Analyst and Project Manager/Presidential Management Fellow General Services Administration (Washington, DC) 1998-1999

Primary duties were to monitor state, regional and local government issues, report on emerging trends and suggest projects and products that the office could create for use by state, regional and local government officials. Advised on purchasing and using multimedia and computer equipment to augment our office website and served as a technical consultant on several office functions. Assigned to the Year 2000 project team that provided support to the President's Commission on the Y2K Date Conversion.

Computer Specialist/Presidential Management Intern

U.S. Social Security Administration (Washington, D.C.) 1997 – 1998

Started as an entry-level programmer in the Earnings and Enumeration Branch. This branch is responsible for creating management information systems for projects concerning the distribution and tracking of Social Security numbers and the tracking of Social Security payroll deductions. Duties were to create front-end Visual Basic applications that would access databases systems (Access, Oracle, DB2) and produce reports from the information contained in the databases. Designated as the office resource on emerging Internet technology. Gave several presentations on current desktop

Development Assistant (1997) and Computer Assistant (1996)

Democratic Leadership Council (Washingon, D.C.)

applications, database modeling tools and groupware.

Database administrator for the membership database (over 10,000 records). Received and processed membership dues and conference fees; supervised data entry of donors and new members; and created and programmed complex reports from Democratic Leadership Council member database. Prepared and supervised mass mailings. Advised

on computer equipment and software. Managed registration activities for onsite and offsite conferences.

Professional Service

Marketing Chair (2006-2007)

Regional Business Exposition (Louisville, KY)

Marketed day-long regional business training event and trade show. Managed mass mailings, secured sponsors, and designed all print and online advertising for the \$25,000+ event.

President (2007), President-Elect (2006), and Vice-President of Programs (2004-2005)

Kentuckiana Chapter of the Project Management Institute (Louisville, KY)

Lead a 500-member+ organization and a board of 12. Represented chapter at business conferences. Planned programs and scheduled speakers for monthly meetings attended by over 90 members and nonmembers. Planned and managed two eight-hour educational workshops.

Member of Executive Committee (2007-2008), Chair of Committee on Committees and Credentials (2007-2008), Member of Ideas to Action Task Force (2007-2008), Part-Time Faculty Committee (2005-2008)

University of Louisville Faculty Senate

Accomplishments of the Part-Time Faculty include:

- L11 category for part-time faculty who have taught at U of L for at least 1 year, which provides year-long contracts and addresses problems with access to benefits.
- 2. Drafted titles and rank for part-time faculty. Passed by the Redbook Committee of the Faculty Senate.
- 3. Drafted and successfully petitioned the Faculty Senate's approval of a Motion establishing guidelines for part-time faculty pay raises.
- 4. Collaborated with the Parking Committee to retain green parking permits and use of the parking deck for part-time faculty.
- 5. Worked with the Delphi Center to develop the Part-Time Faculty Institute, which provides professional development.
- 6. Conducted Biannual Part-Time Faculty Survey for Fall 2006.
- 7. Petitioned for and obtained reduced-fee flu shots for part-time faculty.

Webmaster (2005-2006)

PMI Troubled Projects Special Interest Group

Maintained website and managed membership registration database.

President (2004-2006)

Walden ASPA Chapter (Minneapolis, MN)

Founded chapter and successfully petitioned for recognition from national ASPA.

Earned Value Analysis Standards Team Member (2003)

Project Management Institute (Pennsylvania)

Research and wrote parts for the PMI's standards division. Review and evaluated draft standards. Standard later published as official public of the Project Management Institute

President/Vice-President (2001-2002)

Graduate Management Association (Jones International University)

Rewrote Constitution, expanded number of officer positions, edited and published monthly newsletter, and created Career Center for members. Successfully lobbied university to create university-wide Career Center based on the GMA model.

Honors and Awards

- Pi Alpha Alpha (National Honor Society for Public Affairs and Administration)
 (2006)
- 2. Sigma Iota Epsilon (National Honor Society for Management) (2006)
- 3. Cardinal Athletic Mentor (2004)
- 4. General Services Administration's Year 2000 Achievement Award for the establishment of the GSA Year 2000 Task Force Bulletin, Tribal Government Outreach, and the Federal Government Community Guide (1999)
- Three Federal Fast-Track Awards for creating the Year 2000
 State/Regional/Local Network; the State IT Initiative Datamart; and authoring the

Office of Intergovernmental Solutions 1999 Marketing Plan and Technical Plan (1998-1999)

- 6. Marquis' Who's Who in America (2001)
- 7. Presidential Management Fellowship (1997-1999)
- 8. Who's Who in American Universities and Colleges (1991)
- 9. Golden Key National Honor Society (1990)
- 10. President of Delta Sigma Rho (Speech Honor Society) for two years (1989-1990)
- 11. Thirteen Debate, Impromptu Speaking and Extemporaneous Speaking Awards (1986-1990)
- 12. Weaver Oratory Award (Awarded by Eastern Kentucky for achievement in College Forensics) (1990)
- 13. Dean's List for six semesters at Eastern Kentucky University
- 14. Dean's Award (Recognition for achieving the Dean's List for three semesters or more)

Memberships

- 1. American Society for Public Administration
- 2. American Society for Training and Development
- 3. National Communication Association
- 4. Project Management Institute