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THESIS

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**THE SOCIOTECHNICAL DYNAMICS OF A
TRAVEL MANAGEMENT REENGINEERING
PROJECT**

by

Scott H. Chaney
Roy J. Geberth

September 1996

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**THE SOCIOTECHNICAL DYNAMICS OF A TRAVEL MANAGEMENT
REENGINEERING PROJECT**

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ABSTRACT

This thesis examines the travel management reengineering project of one DoD command. It analyzes the process selection, redesign, and implementation of the travel project and discusses the managerial implications of the project's dynamics.

A review of process innovation, reengineering, and planned-change literature provides a framework for exploring the activities of the reengineering team, but semi-structured interviews and personal observations of project participants are the major sources of data for the analysis.

The analysis is completed with a comprehensive look at lessons learned from the project. The research concludes that the travel management project required senior management participation and guidance, the active involvement of all project team members, and an appreciation for the natural reactions of the intended users of the new process.

TABLE OF CONTENTS

I.	INTRODUCTION	1
	A. OVERVIEW	1
	B. METHODOLOGY	3
	1. Data Collection	3
	2. Analysis	4
II.	LITERATURE REVIEW	7
	A. BUSINESS PROCESS REENGINEERING	7
	1. The Definition of Business Process Reengineering	7
	2. An Overview of the Reengineering Process	9
	3. The Roles of Different Organizational Members	10
	B. PROCESS INNOVATION	11
	1. The Definition of Process Innovation	11
	2. The Process Innovation Methodology	12
	3. The Roles of Different Organizational Members	16
	C. THE THREE-STAGE CHANGE MODELS	17
	1. Organizational Change	17
	2. The Relationship Between Organizational Change and Individual Learning	20
	D. CONCLUSION	26
III.	TRAVEL REINVENTION AT THE JOINT WARFARE TRAINING COMMAND	27
	A. THE JOINT WARFARE TRAINING COMMAND	27
	B. PROCESS IMPROVEMENT VERSUS PROCESS INNOVATION	29
	C. THE CATALYSTS FOR PROCESS INNOVATION	31
	D. THE SELECTION OF TRAVEL MANAGEMENT FOR PROCESS INNOVATION	33
	E. UNDERSTANDING INNOVATION ENABLERS	39
	F. DEVELOPING A PROCESS VISION	40
	G. GAINING AN UNDERSTANDING OF THE EXISTING PROCESS	43
	1. The Necessity of Understanding the Current Process	43
	2. The Decision to Form a Travel Team	43
	3. Problems Encountered While Forming the Team	44
	4. The Team Meetings Begin	46
	H. DESIGNING THE NEW PROCESS	47
	1. Creativity and Idea Generation	47
	2. Signs of Resistance during the Flowcharting the Ideal Travel Management Process	49

	3. The Ideal Process	51
I.	REFINING THE FLOWCHARTED PROCESS AND MOVING TOWARDS IMPLEMENTATION	54
	1. Seeking Support from the Organization	55
	2. Government Regulations	58
	3. Obtaining and Fitting the Travel Manager Plus Software to the Redesigned Process	60
	4. Growing Frustration and the Decision to Disband the Travel Reengineering Team	63
	5. The Selection of the Test Departments	66
	6. The Initial Meetings with the Test Departments	67
	7. The Test Plan	68
	8. Testing	70
J.	IMPLEMENTATION BEGINS	71
	1. The Reaction of Instructors to the Proposed Process	71
	2. The First Test Departments	71
	3. Friedman and Terry's Trip to Washington	72
	4. Friedman's Follow-up Report	73
	5. The Commercial Travel Office Interface	75
	6. The Decision to Add Logistics Management Department as the Fourth Test Department	75
	7. The Decision to Eliminate the International Relations Department from the Test Plan	78
	8. Friedman Transfers	78
K.	ATTEMPTS TO ADDRESS UNRESOLVED IMPLEMENTATION ISSUES	79
	1. Technical Issues	79
	2. The Meeting with the DoD Travel Reengineering Task Force Director	80
L.	THE RELATIONSHIP BETWEEN THE NEW TRAVEL MANAGEMENT PROCESS AND THE END-USERS	82
	1. Proposed Changes in the Relationship Between Instructors and the Travel Management Process	82
	2. The Instructor's Belief that the Process Could not be Improved ...	84
	3. The Instructors' Perception that Things Got Worse, Not Better ...	85
	4. Consensus That The Instructors Were Displeased With the New Travel Management Process	89
	5. How Others Viewed the Instructors' Reactions to the New Process	90
	6. The Reaction of Travel Clerks to the New Process	92
M.	CURRENT STATUS	94

IV.	LESSONS LEARNED	97
A.	A CONSISTENT PROCESS VISION WAS NOT CREATED, ARTICULATED, AND SHARED WITH THE REST OF THE ORGANIZATION	97
	1. Different Visions	97
	2. The Importance of Articulating a Common Process Vision	98
B.	THE ROLE OF THE EXECUTIVE STEERING COMMITTEE	101
	1. The ESC's Role in Shaping the Process Vision	101
	2. The role of the ESC in Committing Sufficient Personnel Resources	102
C.	RESISTANCE WITHIN THE TRAVEL REENGINEERING TEAM	103
	1. Dealing with the Loss	103
	2. Understanding the Old Process	105
D.	THE INSTRUCTORS	106
	1. The Desire to Keep Travel Clerks	106
	2. The Need to Involve Instructors in the Project	107
E.	FRIEDMAN, TERRY, AND TURNER	108
	1. Dedicated Military Members or Simply Outsiders?	108
	2. Implications	110
F.	CONCLUSION	110
	APPENDIX A. TRAVEL TEAM'S IDEAL PROCESS	113
	APPENDIX B. OLD TRAVEL FORMS	117
	APPENDIX C. TRAVEL MANAGER PLUS SCREEN DISPLAYS	123
	LIST OF REFERENCES	127
	INITIAL DISTRIBUTION LIST	129

I. INTRODUCTION

A. OVERVIEW

Pressures to generate new business structures, processes, and cultures have permeated the business environment of the 1990s. Responding to these pressures, managers have begun to embrace new business philosophies designed to create significant organizational change, and this trend will continue into the foreseeable future. According to Kanter, Todd, and Jick, (1992, p. 3),

The approach of the year 2000 . . . suggests the possibility of . . . profound change in our economic life and the institutions . . . that populate it The world is undergoing many major transitions, some of which involve the meaning of business and the character and shape of the organizations that carry it out.

Because of rapidly changing customer demands and increased global competition, in order to survive, private companies have been forced to change their structures and the way that they do business (Davenport, 1990). Faced with dwindling financial resources, many federal government agencies have also felt the need to change their operating procedures. One recent process change initiative within the Department of Defense has involved separate attempts by 29 military commands to redesign their travel management processes (Hudson, 1995).

Whether they impact governmental agencies or large corporations, process-change initiatives all have something in common: organizational change. Organizational change, however, is more complex and difficult than optimistic researchers and managers think (Kanter et al., 1992). One study, for example, concludes that between 50 and 70 percent

of all business process reengineering efforts fail to achieve their intended objectives (Stewart, 1993).

In addition, recent process change philosophies rely heavily upon the use of information technology to alter the way that employees do their jobs, but organizations have historically failed to apply this technology effectively (Hammer and Champy, 1993; Davenport 1993). Hoping to see substantial gains in organizational productivity, managers have been willing to endure the expenses of implementing information technologies. Unfortunately, at a macroeconomic level, increases in organizational productivity have not offset corporate America's aggregate information technology expenditures (Davenport, 1993). Process change requires skillful management if organizations are to avoid spending valuable resources on projects that fail to produce the desired outcomes.

This thesis begins with a literature review that describes several methods organizations can adopt to attempt to effectively manage process change. In the third chapter we use the available planned-change literature, which is reviewed in Chapter II, to discuss a case in which an organization attempted to reinvent its travel management process. This thesis concludes with a section describing the lessons learned from the case presented in Chapter III and that case's implications for future planned change projects.

To ensure that individuals were willing to participate in interviews relating to this thesis, the authors guaranteed interviewees that their actual names would not be used within this document. Consequently, the names of individuals presented in Chapter III and IV have been changed. Additionally, to help ensure the anonymity of interviewees, we

have given the organization that is the subject of this case a fictitious name: The Joint Warfare Training Command (JWTC).

B. METHODOLOGY

1. Data Collection

Because this research attempts to document the actual dynamics of The Joint Warfare Training Command's travel reengineering project, it relies primarily upon data collected through personal interviews. Unlike research tools used to collect quantitative data, personal interviews allow those involved in a particular project to provide detailed descriptions of past events and vividly describe their feelings about those events.

Although the quality of personal interviews is highly dependant upon the skills of the interviewer, the advantage of personal interviews over surveys is that they allow a wider range of responses and provide richer, more detailed research data (Cooper and Emory, 1995).

Eighteen individuals agreed to be interviewed about JWTC's travel reengineering project. Interviewees were either involved with the initiation of the travel reengineering project, the design of the new travel management process, or the implementation and support of the new process. Four of these individuals were responsible for starting the travel reengineering project; eleven were responsible for designing and/or implementing the new JWTC travel management process; five were the intended end-users of the new process; and three were travel clerks whose jobs were changed by the new process.

Interviews were semi-structured and tended to involve three main questions:

- How have you participated in the travel reengineering project?

- How do you view the project's progress to date?
- How would you like to see the project proceed?

Although these questions are general, they provided a starting point for the interviewees to provide detailed descriptions of their involvement in the project, their frustrations and concerns about the nature of the project, and their reasoning for either supporting or resisting the new travel management process. When interviewees were interviewed more than once, follow-on questions were more direct and aimed at gaining specific information about a particular event.

In addition to personal interviews, a portion of this document is based upon the authors' personal observations. Although some observations were unplanned, most were made during three travel reengineering team meetings and three meetings between the project coordinator and travel clerks. The authors also attended one training session in which the project coordinator demonstrated the new process's software.

Finally, project participants provided to the authors their team minutes and the implementation test plan for the new process. The travel-reengineering team minutes covered twelve meetings. The project coordinator also provided us with the minutes from three travel clerk meetings that we were unable to attend. This additional information augmented the personal interviews and provided information that interviewees could not remember.

2. Analysis

Analysis of the interview data followed the technique suggested by Rubin and Rubin (1995) in *Qualitative Interviewing: The Art of Hearing Data*. Analysis began with

the first completed interview. Each interview was analyzed for responses patterns that reflected the subject's reactions to the travel-reengineering project.

Additionally, based upon the content of completed interviews, the interviewers began to search for reoccurring attitudes, beliefs, and expressions in subsequent interviews. This process of attempting to recognize common themes was iterative and continued throughout the interviewing process. Supplemented by the research presented in the reviewed planned-change literature, these themes provided the basis for understanding the implications of the JWTC travel reengineering project.

II. LITERATURE REVIEW

Competitive pressures have forced many organizations to reinvent their processes and endure the often painful process of organizational change (Davenport, 1993). This chapter provides an overview of several process and organizational change models that have been presented in contemporary change literature. Although the following sections are not exhaustive, they provide a framework for discussing the case that we present in the next chapter.

A. BUSINESS PROCESS REENGINEERING

1. The Definition of Business Process Reengineering

Michael Hammer and James Champy (1993, p. 32) define process reengineering as the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.

A process is the collection of activities that, when taken together, takes one or more inputs and produces an output for the customer. Unlike process improvement initiatives, which attempt to change a few activities within an organization's existing processes, business process reengineering focuses on reinventing entire processes. (Hammer and Champy, 1993)

Consequently, automation is a form of process improvement, not business process reengineering. According to Hammer and Champy (1993), organizations tend to mistakenly view the role of technology as a way of enhancing their existing processes. These organizations typically want to automate an existing process without fundamentally

altering that process. Automating an existing process, however, avoids addressing the real problem: an ineffectual, wasteful process. When used with an existing process, automation only increases the efficiency of performing flawed or wasteful tasks (Hammer and Champy, 1993).

Although the use of information technology is an important component of business process reengineering, using information technology to automate an existing process ignores its potential to affect radical process redesign. Instead of using information technology as a means of automating existing processes, organizations should view information technology as a tool that permits them to reengineer their business processes (Hammer and Champy, 1993). They should attempt to determine what new activities information technology will allow them to perform. Hammer and Champy (1993, p. 85) explain,

Reengineering, unlike automation, is about innovation. It is about exploiting the latest capabilities of technology to achieve entirely new goals. One of the hardest parts of reengineering lies in recognizing the new, unfamiliar capabilities of technology instead of its familiar ones.

Business process reengineering is also not the same as organizational restructuring. Hammer and Champy (1993) believe that the problems currently facing companies do not result from their organizational structures; rather they originate from organizations' process structures. As a result, they state that business process reengineering should not be viewed as means of restructuring or downsizing an organization. Although business process reengineering may result in new organizational structures and a smaller workforce, its focus is upon changing processes.

2. An Overview of the Reengineering Process

An organization should begin the reengineering process by first identifying its business processes. Although processes correspond to natural business activities, they can be difficult to identify because they are often obscured by fragmentation and organizational structures. To assist in identifying processes, Hammer and Champy suggest using a diagram, which they call a *process map*, that lays out how work flows through an organization. Work flows, which represent processes, can then be described in terms that state their beginning and end states. (Hammer and Champy, 1993)

After processes are identified and mapped, organizations should select candidate processes for reengineering. Hammer and Champy list three criteria for selecting a process for reengineering. These criteria are:

- degree of dysfunction: How broken is the process?
- importance: How much of an impact does a particular process have on customers?
- feasibility: What is the likelihood of being able to successfully reengineer a given process?

After an organization selects a process for reengineering and forms a reengineering team for that process, the project team needs to understand the existing process before it attempts to redesign the process. Because the team is not attempting to improve the existing process, it should not attempt to analyze the existing process in great detail. The team should instead attempt to gain a high level view of the existing process. The team's understanding of the existing process, however, should be deep enough to provide team

members with the intuition and insight necessary to design a new process. (Hammer and Champy, 1993)

The team next begins to redesign their process. Although Hammer and Champy admit that there is no standard redesign procedure that will ensure success, they nonetheless describe the normative characteristics of the redesign process. During the redesign process, team members should suspend their old values and beliefs and apply imaginative and inductive thinking in their pursuit of a new and better process. (Hammer and Champy, 1993)

Dealing with resistance is an aspect of business process reengineering that Hammer and Champy (1993) say needs to be addressed from the outset of the reengineering effort and continued throughout the project. They describe the appropriate method for dealing with resistance to change as an ongoing attempt to sell both the need for change and the desired end state. Senior managers need to convey two key messages to the rest of the organization: "Here is where we are as a company and this is why we can't stay here. The second is: 'This is what we as a company need to become.'" (Hammer and Champy, 1993, p. 149)

3. The Roles of Different Organizational Members

Hammer and Champy (1993) list several roles that they have seen emerge as part of reengineering efforts. These roles are:

- the reengineering leader - This is a senior executive who is responsible for making the reengineering happen. He or she authorizes or motivates the overall reengineering effort.

- the process owner - This person should be a senior level manager who is responsible for the process targeted for reengineering. This person assembles the reengineering team and enables it to do its job.
- the reengineering team - These individuals are responsible for the actual work of reengineering a business process. The team consists of insiders, individuals who currently work in the process undergoing reengineering, and outsiders, individuals who do not work in the process undergoing reengineering.
- steering committee - This is a group of senior managers who develop an organization's reengineering strategy and monitor its progress.
- reengineering czar - This is the individual who develops an organization's reengineering tools and techniques.

After defining the roles of the project participants, Hammer and Champy (1993, p. 116) conclude,

In some companies they may have other names or the reengineering roles may be defined differently. That's okay. Reengineering is a young art, and there is room for more than one approach.

B. PROCESS INNOVATION

1. The Definition of Process Innovation

Thomas Davenport (1993) expands upon Hammer and Champy's process reengineering philosophy. Business process reengineering, reinvention, redesign, and innovation each implies the same concept: radical process change. Davenport, however, prefers the term *business process innovation* to *business process reengineering* because, according to Davenport (1993, p. 2), "reengineering is only part of what is necessary in

the radical change of processes; it refers specifically to the design of the new process.” In contrast to process reengineering, process innovation focuses on more than the design process. Process innovation also includes envisioning new work strategies and understanding the interaction of technological, organizational, and human factors during the change’s implementation. (Davenport, 1993)

Process innovation, like process reengineering, is different than process improvement because innovation involves making radical changes in the way a particular process is performed. Process innovation seeks a higher level of change than process improvement. While a process improvement initiative involves making a series of incremental changes to an existing process, a process innovation project involves completely redesigning a given process and then implementing the new process. Consequently, process innovation projects take much longer to complete than process improvement projects. In addition, unlike process improvement, process innovation requires a top-down managerial approach, crosses functional boundaries that separate departments, and attempts to change the structure of an organization. Table 1 summarizes the differences between process innovation and process improvement (Davenport, 1993, p. 11).

2. The Process Innovation Methodology

Davenport’s process innovation methodology involves five steps. The first step is to identify those processes which will undergo process innovation. However, before an organization selects candidate processes, it must first identify and define its processes.

	<i>Improvement</i>	<i>Innovation</i>
Level of Change	Incremental	Radical
Starting Point	Existing process	Clean slate
Frequency of Change	One-time/continuous	One-time
Time Required for Change	Short	Long
Participation Style	Bottom-up	Top-down
Typical Scope of Change	Narrow, within functions	Broad, cross-functional
Level of Risk	Moderate	High
Primary Enabler	Statistical process control	Information Technology
Type of Change	Cultural	Cultural and structural

Table 1. Process Improvement versus Process Innovation From Davenport (1993).

Although Davenport (1993) admits that there is no definitive measure of when an organization has defined its processes at the appropriate level of detail, he suggests that organizations should attempt to group their work activities into approximately 10 to 20 major processes.

After an organization identifies its major processes, it can then select which processes it will attempt to change. An organization's capabilities and resources should determine the number of processes that it selects for innovation. Assuming that an organization has a well-defined business strategy, it should select a process for innovation based upon the value of that process to the organization's mission. One method for selecting processes is to choose those strategically relevant processes that the organization's leadership has identified as being flawed or problematic. (Davenport, 1993)

The second step in Davenport's methodology is to identify mechanisms or tools that an organization can incorporate into the design of radically different processes. Davenport calls these tools *enablers*. Identifying enablers involves understanding the potential of new information technologies and organizational structures and appreciating the limitations of using these enablers within the context of a given organization. Although identifying potential process innovation enablers does not involve a thorough analysis of each enabler, such as a detailed cost-benefit analysis, research and discussion of potential enablers should provide managers with a better idea of what enablers their organization could reasonably hope to support in a new process. (Davenport, 1993).

For example, a company that wants to change the way it fills customers' orders should begin by researching the different tools that could be used to support a new order-fulfillment process. That company might then learn of an exciting, new software tool that could be used as one component of the new process. The software would allow its customer service representatives to be more responsive in filling customers' orders. However, after a closer review of this particular enabler, the company might determine that providing workers with the work stations that are needed to run the program would require substantial financial resources and extensive employee retraining. In this case, the company would have to determine if its fiscal concerns should override the potential benefits of using the new order processing program.

The next step in the five-step innovation methodology is to create a process vision. Process visions are the link between an organization's business strategy and its processes. Davenport (1993, p. 117) states,

Congruence or alignment between strategies and processes is essential to radical change in business processes. Strategies and process objectives must reinforce one another and echo similar themes.

Process visions, which should include quantifiable goals and descriptive attributes of the new processes' desired end-states, provide the alignment between strategies and processes and describe how an organization intends to implement its strategy. According to Davenport (1993, p. 118), process visions are important because "strategy cannot motivate in the absence of a well-defined process vision."

The fourth step in Davenport's methodology is attempting to understand the process that is the target of redesign efforts. Understanding the existing process allows individuals who are involved in an innovation project to identify problems in the current process and, consequently, appreciate the potential benefits of redesigning the process. Asking applicable functional departments to describe what they view to be the problems within the current process is insufficient. Because organizational processes involve more than one department and cross functional boundaries, process problems usually go unnoticed until the entire process is viewed and scrutinized as a whole. (Davenport, 1993)

The fifth and final step of process innovation is designing and prototyping the new process. Davenport (1993, p. 153) states that completing the design of the new process "is largely a matter of having a group of intelligent, creative people review the information collected in the earlier phases of the initiative and synthesize it into a new process."

Individuals who participate in the design of the new process should be familiar with the future process's high-level vision. They should also consider the opportunities and

constraints of potential process enablers. With these considerations in mind, the group of process designers can begin to think about new process designs. Davenport (1993) recommends that design team members brainstorm different design alternatives. Following an analysis that evaluates each design's relative benefit, cost, risk, and implementation time frame, the team should select the process that appears to be the best of the available alternatives.

Before an organization can attempt to migrate to the selected process, it must first test the design of the new process to ensure that it will operate within the existing technological and organizational environment. Therefore, prototyping follows the selection of the new process design. Davenport defines prototyping as the process of using a small-scale, quasi-operational version of a new process to test the process design. Prototyping is an iterative learning process that seeks to establish a fit between the new process structure, information technology, and the organization. As a result of prototyping, senior managers and the design team may discover that the new process design requires additional refinement to fit within accepted organizational and technological constraints. (Davenport, 1993)

3. The Roles of Different Organizational Members

Davenport (1993) states that a successful innovation project requires more than the dedication of a single charismatic leader. He lists four major change roles that need to be filled as part of a process innovation project. These roles are as follows (Davenport, 1993, p. 179):

- the change advocate, the person or group who proposes and desires the change

- the change sponsor, the person or group who, through their leadership ability and position within the organizational hierarchy, legitimizes the change project
- the change target, the individuals who must undergo the proposed change
- the change agent, the individuals or groups who are responsible for implementing the change

According to Davenport (1993, p. 179), "One of the most common mistakes made by companies embarking on process innovation is choosing the wrong sponsor." Process innovation requires senior managers to present the rest of the organization with a unified endorsement of the need for change and the innovation project's goals. Although it may not exist when a change is first proposed, this unified front needs to be developed early in a project because it is a prerequisite to the rest of the organization taking a process innovation project seriously. Successful process innovation may also require that certain job positions and reward structures be modified or eliminated. It is the responsibility of the change sponsor to ensure that these requirements are met. Therefore, the change sponsor, who may be more than one individual, should come from the most senior ranks within an organization. (Davenport, 1993)

C. THE THREE-STAGE CHANGE MODELS

1. Organizational Change

Planned change literature typically models successful organizational change as a three-stage process. Kanter et al. (1992, p. 376) list the different terms used by various researchers to explain the three-stage change process:

- Kurt Lewin called these stages *Unfreezing*, *Changing*, and *Refreezing*.

- Richard Beckhard and Reuben Harris called them *Present State*, *Transition State*, and *Future State*.
- Noel Tichy and Maryanne Devanna used the terms *Awakening*, *Mobilizing*, and *Reinforcing* to describe the three stages.

Regardless of the terminology used to describe the various three-stage change models, a reoccurring theme emerges from each model (Kanter et al., 1992, p. 375):

- In stage one the organization realizes that the old way of doing business is unacceptable and, therefore, it is time to separate from the past.
- In stage two the organization embraces a vision of the future and unites behind those activities necessary to achieve the desired future state.
- Finally, the organization institutionalizes new attitudes, practices, and policies that serve to solidify the change.

Kanter et al. describe the different roles that groups of individuals within the organization assume as part of the change process. Stage one consists of change strategists. These are the individuals who assess the need for change based on the organization's external and internal environments. They determine to what degree change is needed and attempt to convince others that the change is necessary. Change strategists lay the foundation for change projects and formulate the vision of the desired future. (Kanter et al., 1992)

Change implementors are the predominant occupants of stage two. These individuals are responsible for instituting the desired changes. They follow the guidance of the change strategist, and depending on the degree of control exercised by the change

strategist, they may develop an implementation plan for accomplishing the change.

Change implementers manage the day-to-day change process. Thus, they must respond to the demands of the change strategist while attempting to convince others affected by the change to cooperate in the change process. (Kanter et al., 1992)

Change recipients, who are involved extensively with stage three, are the largest group in the change process. These are the individuals who will ultimately determine the outcome of a change project. Their attitudes about a particular change will affect their behavior, and their attitudes will determine whether they continuously resist or institutionalize a given change. If change recipients are unwilling to change the way that they are currently working, change strategist and implementors will find it difficult to create a permanent organizational change. Consequently, one requirement for lasting change is the change recipients' belief that change must occur because the old way of doing business is unacceptable. (Kanter et al., 1992)

Although individuals can be associated with a particular group's role and stage within the three-stage change models, Kanter et al. (1992, p. 377) state that "any given person in an organization is likely to assume each of these roles at some point during the different phases of the change process." For example, a manager who starts a business process reengineering project to correct what she understands to be an unacceptable process may eventually become a change implementer in addition to being a change strategist. If a process-innovation team contains individuals from those functional departments that will be affected by the team's proposed changes, some change implementers will also become change recipients.

2. The Relationship Between Organizational Change and Individual Learning

Because successful change relies heavily upon the reactions of an organization's many change recipients, it is important to understand how individuals respond to change. Tannenbaum and Hanna (1985, p. 103) believe that all organizational change is mediated through individuals:

The nature of any system change and the degree to which it is realized ultimately depend upon the unique responses of the individuals who are involved in the change. No system can effectuate change unless that change is supported-ideally with enthusiasm-by the individual members of the system.

Therefore, successfully managing organizational change requires appreciating and, when possible, managing personal change.

Tannenbaum and Hanna's research has led them to conclude that individuals react to change by following a common pattern. Individuals initially respond to change by attempting to hold on to those beliefs, feelings, and behavioral patterns that are threatened by the change. The need to hold on is basic to any change process and is a natural facet of being human. Change recipients may eventually let go of their old patterns of thinking and acting that keep them from changing. If individuals are successful with this second step, letting go, they are then ready to move on to the final stage, realizing the possibilities of a new future. (Tannenbaum and Hanna, 1985)

There are several reasons why people attempt to maintain their current reality and have difficulty letting go of their old ways of viewing the world. Holding on provides individuals with a sense of security and stability. It is a denial of the uncertainty that

change creates. A person may also attempt to maintain their existing perception of reality because they feel that such attempts will hopefully prevent them from experiencing the work and frustration of breaking old habits. (Tannenbaum and Hanna, 1985)

There is, however, a subtler and more powerful reason why people resist letting go of familiar habits and beliefs. People often unknowingly resist change because it threatens the mental constructs that they use to understand their lives. Although understanding the power of a people's mental constructs is essential for effective change management, Tannenbaum and Hanna state that change managers and change recipients typically ignore this other cause of resistance. They ignore this source of resistance because it is unique to each individual, is rooted in a person's unconscious, and involves strong and threatening emotions for the person who is attempting to hold on to the past. (Tannenbaum and Hanna, 1985)

Beginning with childhood, an individual's past experiences shape how he or she comes to understand their environment. This mental framework, which manifests itself through a set of beliefs and associated patterns of behavior, is a component of a person's sense of identity, and it allows a person to interpret confusing situations that may be encountered in day-to-day life. More importantly, it is also a mechanism that allows a person to explain upsetting life events and painful personal encounters. Consequently, letting go of firmly entrenched beliefs and their associated patterns of behavior can be equivalent to relinquishing a deep-seated, psychological coping mechanism. Individuals tenaciously struggle to hold on to their existing patterns of thinking and acting because holding on to these patterns maintains their perceptions of reality and their unconscious

coping mechanisms. (Tannenbaum and Hanna, 1985)

There are many situational variables that are relevant to any effort to help people let go of old patterns of thinking and behaving. Nonetheless, Tannenbaum and Hanna suggest a few approaches that organizations can adopt to facilitate individual change. They recommend that organizations attempting to facilitate the change process promote an open environment in which individuals trust each other and participate in making those decisions that involve organizational change. They also claim that forcing individuals through the change process is counterproductive. Therefore, effective change requires a more patient approach on the part of senior managers. Finally, they recommend that organizations use skilled change specialists who can help and support individuals throughout the change process. (Tannenbaum and Hanna, 1985)

Recently Bridges (1990) has also outlined the anticipatable dynamics of those experiencing transition and has discussed the managerial implications of those dynamics. Bridges refers to the change process as *transition*. According to Bridges, change happens at a particular point in time when something old stops or something new starts. The actual change process involves a three stage psychological transition, and it is this transition, not a particular change at a given point in time, that often results in the behavior that people interpret as resistance to change. (Bridges, 1990)

The first stage of transition, which Bridges (1990) calls *the end of the world*, occurs when individuals experience a sense of loss because of some change. The change can be a new boss, a new job, or a new organizational structure. Regardless of a particular change's scope or value, every change causes somebody in the organization to

lose something. People, however, respond differently to loss; a person's response to a loss depends on how deeply that loss personally affects him. (Bridges 1990)

Loss resulting from change tends to fall into at least one of six categories. Change can cause a *loss of attachments*. A loss of attachments results in individuals losing their sense of being connected to another individual or group. Change can also result in a *loss of turf*. Bridges (1990, p. 42) defines *turf* as "everything from people's physical territories to fields of responsibility based on their expertise." When change alters or eliminates existing patterns of authority, reporting, or physical structure, it creates a *loss of structure*. Change can also take away a facet of an individual's anticipated future. This is a *loss of future*. Individuals may lose their ability to make sense of the world, and they may struggle to understand why a particular change has happened. This is a *loss of meaning*. Finally, change can cause a *loss of control*. With this type of loss, individuals feel as if they have no power to affect the final outcome of events that the change has set into motion. (Bridges, 1990)

People respond to loss by grieving. Grieving is a two-step process that involves a mental struggle to hold onto what was lost. The first part of the grieving process results in self-protective attempts to convince oneself that the change has not or will not happen and occasional expressions of anger and distress. Once individuals move beyond their denial and anger, they show the second portion of the grieving process. During this period, they begin to vacillate between trying to retain whatever has been threatened by change and accepting its loss. (Bridges, 1990)

Grieving is a natural response to loss. In addition, a period of grieving is essential if change recipients are to successfully continue their transition to a new reality. Thus, managers who advocate change should not stifle the grieving process or attempt to rush people through it. Although managers may feel uncomfortable in supporting sanctioned grieving mechanisms, the destructive potential of a stifled grieving process easily outweighs the discomfort of dealing with a grieving individual. When change recipients are unable to express their emotions surrounding a loss, their suppressed tensions will ultimately hinder the change process. Because grieving is both a natural and necessary component of change, Bridges (1990, p. 52) states,

Transition management . . . must begin with finding ways to legitimate the grieving process so that losses are worked through to acceptance. The first thing that such legitimation requires is an educational effort. Leaders need to understand and show through their words and deeds that it is acceptable within the organization.

After a person finishes the grieving process, they enter a period in which they recognize that the change has made part of their past irrelevant. However, because the change process does not create instantaneous results, a new perceived organizational reality has not yet emerged to replace that which was lost. Bridges uses the term *neutral zone* to describe this stage between the old and the new. Because individuals have lost their old control structures, the neutral zone creates its own problems. Individuals may become confused, depressed, and apathetic. People who were once energetic and content workers may suddenly become unmotivated and hostile employees. (Bridges, 1990)

Although the neutral zone can be painful, an organization's leadership can make this second stage less painful and more productive for change recipients. Leaders should

emphasize the potential for individual growth in the neutral zone. Because change recipients are no longer bound to old ways of doing business, the neutral zone provides them an opportunity to be more creative and forge their own visions of the future.

(Bridges, 1990)

Managers should also fill the void that was created when past organizational structures and policies were eliminated. Bridges recommends that organizations develop a plan for supporting people throughout the neutral zone. As a result of this plan, change managers should be able to establish interim procedures and policies to direct the work activities that the change has altered. The plan should also outline temporary lines of authority and reporting. These interim mechanisms will provide change recipients with some sense of structure until they are able to migrate to the new organizational form.

(Bridges, 1990)

Once individuals are convinced that the past is no longer relevant, begin to seriously contemplate alternatives, and are willing to consider something new, they are ready to begin *making a new beginning*, which is the last stage of transition (Bridges, 1990). It is during this stage that change strategist and implementers should attempt to institutionalize the desired outcomes of their planned-change process. Although advocates of a particular change may be tempted to simply implement and enforce the use of a new process, individual transition takes time. Bridges (1990, p. 82) explains why change managers should avoid rushing through or skipping the two previous stages:

An untimely attempt to launch the new beginning can be worse than merely ineffective, since it can abort the transition itself. Timing explains the importance of something that good managers do instinctively: They

withhold their own new idea until their people are convinced that the old ideas are no longer working. They “sell the problem” before they try to “sell the solution.”

D. CONCLUSION

The literature on reengineering, process innovation, and organizational change points to the complexity of successfully implementing planned change. This literature, however, is largely normative and, while acknowledging implementation issues, fails to fully appreciate the sociotechnical dynamics involved with implementing technical change. The remainder of this thesis is an attempt to fill that gap. It is an attempt to acknowledge the dynamics of transition and the unintended social consequences of innovative reengineering efforts. The next chapter borrows from the insight of the planned-change literature to document the actual sociotechnical dynamics that occurred during one reengineering effort. Following this, we will explore the social and managerial implications discovered during the study of the Joint Warfare Training Command’s travel reengineering project.

III. TRAVEL REINVENTION AT THE JOINT WARFARE TRAINING COMMAND

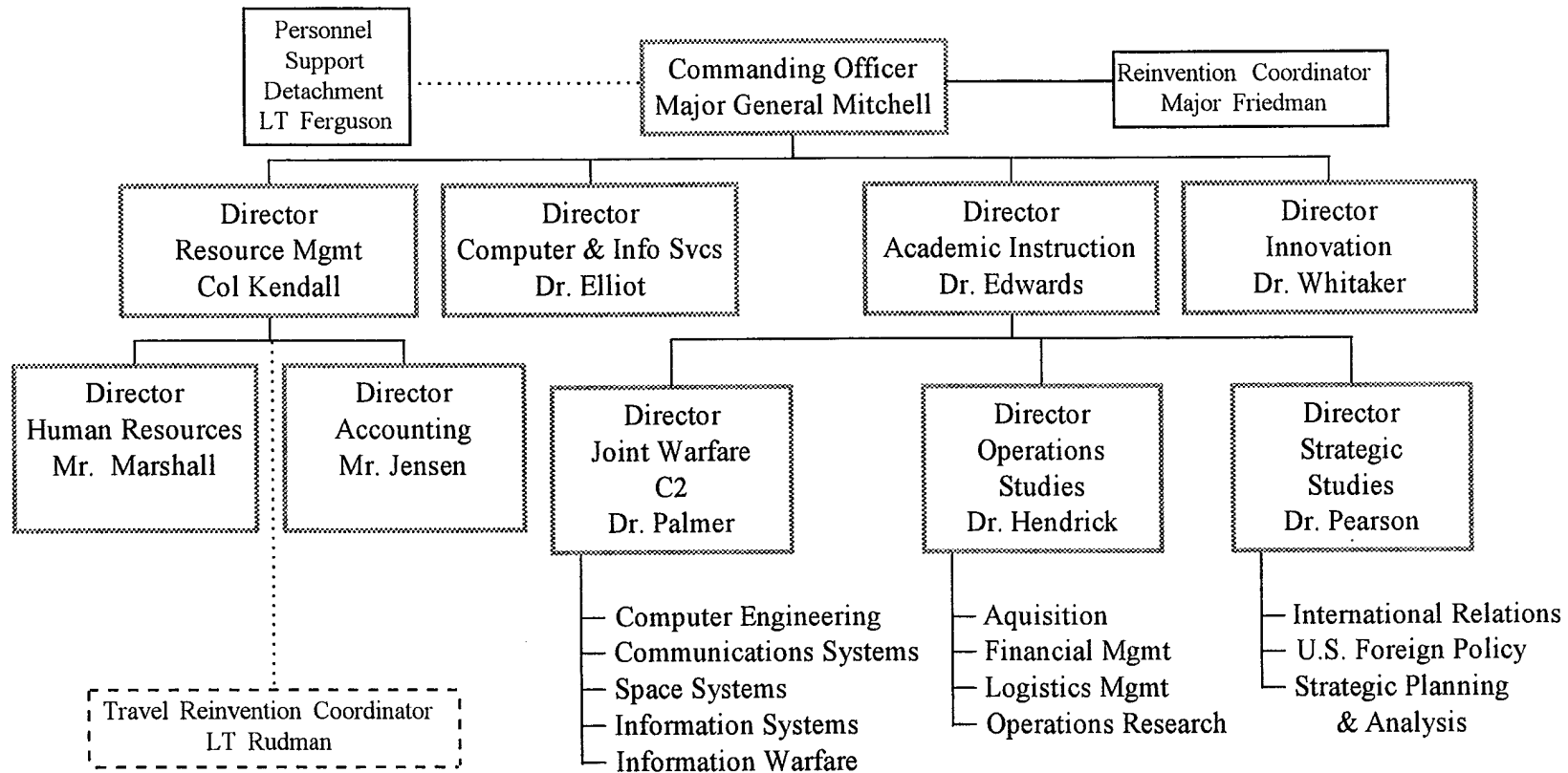
A. THE JOINT WARFARE TRAINING COMMAND

The Joint Warfare Training Command (JWTC) is an Atlantic Coast combined-service command responsible for training U.S. military officers in academic course work relevant to joint warfare. Each service provides personnel to help staff the school, but overall administrative responsibility for the school is the responsibility of a single service. During the time period covered by this document, the Department of the Navy (DoN) managed the school's administrative functions, but the school's two commanding officers were Army officers.

Figure 1. is an organizational chart for JWTC. Civilians staff most of JWTC's administrative departments, and civilian faculty teach the majority of the school's courses. There are 12 academic departments at JWTC, and each department falls under one of three academic directors who oversees a broad area of study. These areas of study are Joint Warfare Command and Control, Operations Management, and Strategic Studies. The following academic departments participated in the travel reengineering project: Communication Systems, Information Systems, International Relations, and Logistics Management.

The School's Reinvention Coordinator, who had been responsible for JWTC's travel reengineering project, worked directly for JWTC's Commanding Officer until March 1996. The School eliminated the job of Reinvention Coordinator in March but did establish a full-time Travel Reinvention Coordinator position. The Director of

Joint Warfare Training Command



as of Mar 96

Figure 1. JWTC Organizational Chart

Resource Management then assumed responsibility for directing the activities of the Travel Reinvention Coordinator.

B. PROCESS IMPROVEMENT VERSUS PROCESS INNOVATION

In order to understand the attempts to change the travel management process at JWTC, it is necessary to first distinguish between process innovation and process improvement. Davenport lists several factors that distinguish process innovation from process improvement. Attempts at process improvement usually involve continuous, incremental changes that begin with an existing process. These type of change projects are characterized by a short duration, bottom-up participation, and moderate risk to the organization. Process improvements may attempt to bring about a cultural change within the organization, but they do not change the structure of the organization (Davenport, 1993). Ongoing attempts to identify and correct manufacturing processes that result in an unacceptable number of faulty components is an example of process improvement.

Regardless of the final outcome of the JWTC's travel reengineering effort, the project's attempt to change the travel management process represents an attempt at process innovation. Process innovation is a level of change that is more radical and risky than the incremental changes associated with process improvement. Personnel involved with process innovation view the process to be changed from a clean-slate and take their direction from the organization's senior management. Although the business objective of the process to be changed may remain the same, unlike process improvement, the means of accomplishing that objective are not predetermined. Information technology is often the tool that is used in the changed process, and those that design the changed process

intend for information technology to change both the organization's culture and structure. (Davenport, 1993)

Prior to the development of a travel reengineering team at JWTC, the School's Accounting Director purchased a financial version of the Travel Manager Plus software package. Travel clerks within the academic departments could use this software to generate some common travel management forms. The Accounting Director also hoped that the installation of this software would reduce the need for the School's academic department travel clerks to hand carry travel paperwork from their offices to the Accounting Office. According to Lieutenants Glenn Terry and Richard Turner, who were two students involved with the travel reengineering project, the Accounting Director wanted to use the financial version of the Travel Manager software to automate as much of the existing travel management process as possible. He wanted to improve the current process rather than innovate.

In contrast to the Accounting Director's plan for process improvement, the travel reengineering team proposed a more ambitious plan for changing the School's travel management system. They were involved in process innovation. Their design involved using a newer version of Travel Manager Plus, and they intended to use the software in a totally redesigned travel management process. This redesigned travel management process called for changes in both people's beliefs and the organization's structure. We will describe the details of the proposed changes in later sections.

Tannenbaum and Hanna would call process innovation *basic change*. When compared to superficial change, which involves giving up attributes that are relatively less

important to a system's identity, basic changes are difficult or impossible to make (Tannenbaum and Hanna, 1985, p. 102). Basic changes are difficult because they involve people giving up attributes of their identity and facing uncertainty. In addition, as an attribute becomes more central to a person or group's identity, it becomes more painful for individual's to relinquish the identifying attribute.

Tannenbaum and Hanna's change model provides another framework from which to view JWTC's travel reinvention project. The model predicts that the School's attempt at process innovation will not similarly affect all of the involved individuals. Although the overarching goal of process innovation might be basic change, the change's impact on some groups will be superficial because it does not fundamentally alter those group's sense of identity. The same change, however, will represent basic change for other groups. Tannenbaum and Hanna's model predicts that those in this second grouping will be more resistant to the change process relative to those who are only superficially impacted by the new travel management system.

C. THE CATALYSTS FOR PROCESS INNOVATION

The need to improve financial performance is the most common reason that private-sector organizations try process innovation (Davenport, 1993). Customer service, productivity, and coordination between functional departments can impact an organization's financial performance; therefore, companies typically target these areas for process innovation. Nonfinancial objectives, however, are typically more effective at inspiring efforts to innovate processes (Davenport, 1993).

A desire to eliminate waste, increase productivity, and improve customer service within the travel management process resulted in the formation of a travel reengineering team. As will be discussed later, these were the primary objectives of the travel reengineering team, but they do not fully explain why the School chose to attempt its first process innovation. The travel reengineering project represents the School's first attempt to reengineer one of its own processes, and one nonfinancial objective was at least partially responsible for this first attempt.

Prior to the School's efforts to change its travel management system, the Navy designated JWTC as the Navy's first Reinvention Laboratory. This designation resulted in a change of what others from outside the School expected from JWTC and what the School expected from itself. Kanter et al. (1992) explain that organizations behave in ways that conform to institutional beliefs about how they ought to be structured. JWTC's *Reinvention Laboratory* designation brought with it a new set of institutional beliefs. Therefore, the School had to conform to new expectations and beliefs in addition to its familiar views of itself as a center of higher learning; it had to behave like a School and a reinvention laboratory.

Senge (1990) helps clarify how a title can impact behavior. The *Reinvention Laboratory* title became a part of the language used to describe the School, and by changing peoples' perceptions of the School, this language affected the School's behavior. Because language determines what we are prepared to see (Senge, 1990), the words *reinvention laboratory* changed the Schools perception of itself. The School had never successfully redesigned a local business processes, and this fact acted in conjunction with

the new title to create a perception of institutional inadequacy.

These feelings of inadequacy resulted in a sense of urgency and importance surrounding the travel reengineering project. One of the project's initial members described how the School's reinvention leadership viewed the travel management reengineering effort:

They've had no success at reinvention, internal successes where they could reinvent anything at the School. They have been successful at doing some stuff for other commands like doing research projects and helping some other commands reinvent something. As far as internally, they haven't enjoyed any real success stories. So they're looking for one.

Another team member explained,

One of the reasons that I think Travel Manager is so important, apart from its own intrinsic importance, is that it really is sort of our pilot attempt to reinvent the place. So I really see it as pretty crucial to get a demonstrated success.

D. THE SELECTION OF TRAVEL MANAGEMENT FOR PROCESS INNOVATION

Identifying processes for innovation is the first step of Davenport's five-step process innovation model. Davenport describes this step as the process of identifying an organization's major processes and then selecting certain processes for innovation. The selection of a particular process should be based on the organization's resources, the strategic relevance of the target process, the organization's dissatisfaction with that process, the scope and boundaries of the process, and the cultural and political climate surrounding the process. Assessment of the cultural and political climate surrounding a process is important because it enables those who select the target processes to avoid change efforts that would probably have insufficient support from the organization.

(Davenport, 1993)

Prior to any attempts by JWTC to redesign the travel management process, it was recognized by the federal government that its current travel management system was plagued by inefficiencies. For example, as part of the 1993 National Performance Review (NPR), which was led by Vice President Al Gore, the Defense Performance Review (DPR) identified the travel management system as a potential target for reinvention. According to the Director of the Defense Performance Review, General McInerney, the DoD spent \$2.3 billion overseeing and administering travel but only spent \$2 billion on actual travel expenses (Cohen, 1994). Several organizations throughout the federal government, including the Air Force and the National Security Agency, responded to this assessment by launching their own travel reinvention programs.

Dr. Whitaker, who is now the School's Director of Innovation, was the first person from JWTC to visit a DoD site that was attempting to reinvent travel. During a trip to Washington D.C., Air Force District of Washington (AFDW) personnel described to Dr. Whitaker their efforts to redesign the travel management process. Whitaker, who was impressed by the AFDW's use of Travel Manager Plus in a reengineered travel management process, returned to JWTC and relayed his experiences at AFDW to Dr. James Elliot, who at this time was teaching resource management modeling courses within the Department of Logistics Management.

Dr. Robert Hendrick, who visited AFDW with Whitaker, was also a member of the JWTC reinvention laboratory. After learning of the Air Force's success with travel reinvention, Hendrick viewed travel reinvention as an exciting possibility for improvement

at the School. Hendrick said that he was anxious to try something similar to the AFDW project because it would make JWTC's travel management system "better, cheaper, and faster."

As a result of a later visit to AFDW, enthusiasm for travel reinvention at JWTC continued to grow and gather momentum. Prior to July of 1994, Dr. Whitaker returned to Washington with Dr. Elliot. The Two visited AFDW, where Air Force personnel described their reengineered travel management process to Elliot. Before this visit to AFDW, neither Whitaker nor Elliot knew that travel reengineering would become the School's first attempt at process innovation. They were interested in reinventing processes at JWTC, but this visit to AFDW resulted in a renewed interest in reengineering travel management and set off a series of events that eventually laid the ground work for redesigning the School's travel management system. As Elliot said,

We were talking to him (Captain Roy Barger, from Air Force AFDW) just as part of our general interest in reinvention, which is something that Dr. Whitaker is very involved in. That triggered our interests because it looked like it was a potentially big win.

After he returned from his Washington trip, Elliot began advertising travel reengineering as a potential research-paper topic to his students. Two students in Elliot's modeling class, Lieutenants Terry and Turner, agreed to perform an analysis of the Navy's travel management process for a class project. After discussing the topic in class, Terry and Turner traveled to Washington D.C. in August 1994 and examined AFDW's FASTravel, the Air Force's name for their reinvented travel management system. As part of their class paper, Turner and Terry also studied the costs associated with handling a

travel instance.

Turner and Terry's research was important for two reasons. Their knowledge of the travel management process and experiences with the Air Force's FASTravel system would later become indispensable to the School's newly named Reinvention Coordinator. In addition, their class paper made indisputable many of the inefficiencies with both the JWTC and DoD travel management systems. Elliot described the scope and impact of Turner and Terry's paper:

[It] turned out to be very influential. It was, I think, one of the few, if not the only, attempt to document the actual costs of handling a travel instance: getting travel arranged, eventually submitting a voucher, getting paid, and that sort of thing. They wrote a first class paper, and that was circulated quite a bit in Washington as I understand it. I think that even the White House got it. GAO got it.

The experiences of Whitaker and Elliot in Washington and the research of Turner and Terry were important in the ultimate decision to select the travel management process for redesign, but both the instructors and some senior personnel at the School did not need additional evidence to reinforce their dislike of the School's current travel management system. Whitaker exclaimed that he could not go across the campus without an instructor coming up to him to complain about the School's travel management process.

The dissatisfaction of the faculty was apparent enough for the School's Commanding Officer, Major General Mitchell, to take notice. Major Ralph Friedman, who became the School's Reinvention Coordinator in November, 1995, said that travel management and passport management had become two of the General's "pet peeve's." Colonel Stan Kendall, the School's Director of Resource Management, accredited the

General's dislike for the existing travel management system to the frequent complaints voiced by instructors:

When I got here in October-November of '94, General Mitchell was particularly unhappy with the way travel was being administered in general in direct response to all the histrionics that primarily all the faculty folks raise about travel, and basically he said, "Do something." So, at the time, travel manager was basically a gleam in our eyes. Ralph Friedman, Major Friedman, was primarily doing reinvention kinds of things. This fell under that umbrella very loosely. Frankly, myself and the Accounting Director grabbed Major Friedman and said, "Let's get on with this."

Friedman's decision to attempt to change the travel process, however, was not based on Colonel Kendall's direction to "get on with this." Kendall's office would by necessity become an important part of the redesign process, but, as Friedman frequently stated during his interview, he worked for the Commanding Officer, not Kendall. Because Friedman worked for the Commanding Officer, he could have chosen either travel management or passport management to be his first project.

The issue of which process would become the target for the School's first attempt at process innovation was eventually settled sometime during the 1995 January - February time frame. Up to that point there had been no unified or systematic attempt to reengineer the travel management process. The Accounting Director did purchase the financial version of Travel Manger Plus in the fall of 1994, but as discussed previously, the Accounting Director intended for the software to be used in automating the existing process. Dr. Elliot was aware of the growing interest in improving the travel management process. Therefore, he decided to gather those individuals who were interested in changing travel management for a meeting in which Terry and Turner presented a brief on

travel reengineering efforts at the national level. Those present at the meeting included: Elliot, Friedman, Kendall, Dan Najarian, who heads the School's Computer Center, and Lucy Wade from the School's Total Quality Leadership (TQL) Office.

This meeting represents a definitive point in the process innovation model described by Davenport. Shortly after the meeting, Friedman decided to put together a team to reengineer the travel management process. Major Friedman had chosen travel management as the School's first process innovation effort.

No one single factor resulted in the selection of travel management for reinvention. Instead, a number of interrelated forces and activities culminated in the selection of travel management for process innovation. The factors and events that culminated in a final selection include:

- a compelling desire to reengineer a local process - any process
- Whitaker and Elliot's visit to AFDW, which sparked their enthusiasm
- Terry and Turner's research, which was initiated because of Whitaker and Elliot's AFDW visit
- the meeting in which Turner and Terry briefed their research
- the faculties perceived dislike of the existing travel management process
- and, the availability of a viable commercial software product, Travel Manager

If any of these items been absent, it is doubtful that the effort to reinvent travel management at JWTC would be as far a long as it is today.

E. UNDERSTANDING INNOVATION ENABLERS

An organization should have a high-level understanding of the different mechanisms that can be used in a new, innovative process before it attempts to redesign an existing process (Davenport, 1993). These mechanisms, which Davenport calls *enablers*, can become building blocks for new processes. They include different organizational structures, human resources, and information technologies.

Contrary to Davenport's normative model, those involved in the travel reengineering project did not go through a formal step of identifying innovation enablers. The early work of Whitaker, Elliot, Terry, and Turner, however, did identify one possible approach to redesigning the travel management process. Specifically, through their visits with AFDW personnel, each of these individuals saw first hand how the Air Force had applied a particular software package to a redesigned and improved travel management process. As Davenport (1993) explains, examining how other organizations have applied various enablers allows an organization to better design a new process.

Although the project founders were potentially aware of many enablers through class work, job experience, and visits with AFDW, Davenport's model includes within the enabler identification stage other steps in addition to identification. Once potential technological and organizational opportunities for process change have been identified, an organization needs to determine what constraints exist that would limit the application of a particular enabler within a new process. Organizations also need to determine which constraints should be eliminated to allow the application of a particular enabler. Individuals involved in a particular process innovation can then use the remaining enablers

to help shape the process vision (Davenport, 1993).

Although Davenport admits that the conventional process reinvention wisdom espouses examining enablers after the process is designed, his model does help explain many of the problems that the project team encountered during its attempt to design and implement a new travel management process. For example, because the School's leadership never stated that job security was an organizational constraint, Friedman was working under the assumption that the team could legitimately propose eliminating jobs. As will be shown in later sections, the failure of the project team to appreciate existing constraints and the failure of senior leadership to define boundaries for the project helped to create much of the frustration felt by the project's participants.

F. DEVELOPING A PROCESS VISION

Creating a process vision is another prerequisite to process redesign. Because processes should be picked for change based partly on their strategic relevance, Davenport (1993) states that the process vision is an important link between an organization's business strategy and action designed to implement that strategy. Davenport's concept of process vision includes two components: process objectives and process attributes. Process objectives are quantified targets for the process innovation project, and process attributes are qualitative descriptions of the envisioned future state. Davenport (1993) explains that, for a process to be successfully transformed, guidance for the process innovation needs to be made explicit and operational through a vision that describes the desired process's functionality, change objectives, and qualitative future state.

Here again, the JWTC travel reengineering project deviates from Davenport's normative model. Neither Friedman, Kendall, or the School's Executive Steering Committee (ESC) explicitly stated a consistent process vision. Nonetheless, different personnel involved with the project developed their own visions of what the future state should look like. Whitaker wanted the project to result in a streamlined process that would save money and legitimize the School's position as a leader in process reinvention:

We want to make it easier on the travelers, Okay, but we also need to save some damn money, and [eliminate] some people, some slots, and be able to demonstrate to the rest of the world that we are ready to kick some butt around here.

Throughout the project, Friedman stressed the need for the new process to remove inefficiencies that existed in the old process and save money. Friedman wanted to create a process that would eliminate unnecessary paperwork and job positions. Although Friedman felt that the new travel management system would also benefit the traveler, as will be discussed later, he was more interested in creating what he considered to be a less wasteful process.

The ESC did not specify a desired end state for the project, nor did they mandate that the travel reengineering team work towards a specific goal. Friedman, however, felt that they wanted a new process that would be less expensive to maintain. Friedman described the reaction of the ESC following the completion of the new process design:

At that time they [the ESC] said go forth because we estimated that we could save like a third of a million dollars a year in administrative costs [this figure was determined locally] by transferring to an electronic system if it were adopted School wide.

Terry agreed that the new process should remove unnecessary steps, but his process vision also focused on using technology to improve conditions for the customer. In Terry's image of the future state, travel process customers would use IT imbedded in an improved, radically different process. According to Terry,

The thing that interests you is that you can see a system that would be so dramatically better, not just save a little bit of time or maybe a little easier on you, but dramatically better in a sense that you kind of envision a system where a traveler can sit there at a computer terminal and pull up and say, "I need to go to Washington this week and these are the airline times and routes that will get me there and that are within the government contract rates." You can see all that kind of stuff, you can punch it all into the computer, it could get spit out and get tickets back in a very timely fashion. . . . It's kind of exciting to be at least talking about being able to change something with dramatic results.

Terry considered technology instrumental in providing end-users with the level of customer satisfaction that he envisioned in the new process.

Because Colonel Kendall's responsibilities included overseeing Jensen's Accounting Department, which is responsible for the execution of the School's budget, Kendall's vision of the future is also important. Kendall, however, was not interested in process innovation. He was interested in automation, and therefore, his vision of the future did not include any changes to the School's financial authority structure.

According to Kendall,

The thrust was initially an end-to-end kind of situation [the process proposed by Terry and Turner]. I said basically, "The hell with the end-to-end thing. Let's attack the orders, the order production side of it, first, and then we'll let the other side of it flow."

Kendall wanted a system that would initially keep the current process intact, but he also wanted to improve efficiency through the use of information technology to automate the

production and handling of travel requests. Kendall initially wanted process improvement, not process innovation.

G. GAINING AN UNDERSTANDING OF THE EXISTING PROCESS

1. The Necessity of Understanding the Current Process

Although Davenport admits that some process innovation methodologies do not include this step, he stresses that it is necessary for process innovation efforts to include an attempt to understand the existing process before designing a new one. An understanding of the existing process is important for several reasons. First, an understanding of the current state helps those involved in the innovation activities to develop a common framework from which to view the existing process state. Understanding the current state thoroughly is crucial to ensuring a successful migration to the new process. Also, if the process design team members do not understand the existing process, they may duplicate problems with the current process in the redesigned process. Finally, according to Davenport, an understanding of the existing process allows those involved with the innovation to see the value of the proposed innovation. (Davenport, 1993)

2. The Decision to Form a Travel Team

Although Friedman could rely on Terry and Turner to explain the fundamentals of the existing travel management process, he needed to have a cross-functional team at his disposal that could explain the details of the old process. Friedman also needed assistance in designing a new process. Recognizing this, he decided to put together a travel reengineering team, which would have as its first responsibility the task of understanding the existing process.

Terry recalled that Friedman intended to use the team throughout the innovation effort. Friedman expected team members to assist in understanding the current system, developing an innovative replacement process, and implementing the new process. To accomplish these goals, he selected team members from various departments throughout the School based on their functional knowledge of the existing process. Team members included a travel clerk, a representative from the TQL office, two representatives from the Accounting Department, Terry, Turner, Elliot, LT Jean Ferguson, who was the Personnel Support Detachment's (PSD) Officer in Charge (OIC), Master Chief Bob Hutton, who was a PSD disbursing clerk, and occasionally a representative from SATO, the School's Commercial Travel Office (CTO).

3. Problems Encountered While Forming the Team

While attempting to put together the travel reengineering team, Friedman began to encounter initial signs of resistance and evidence that not everybody involved with the innovation project was thoroughly committed to change. For example, shortly after Friedman decided to put together a team, the Accounting Director's office replaced a representative desired by Friedman with another representative. Anne Flood explained that she became the replacement from the Accounting Department because the representative that Friedman wanted was allegedly "too busy to attend the team meetings."

Even when the individuals selected by Friedman attended the team's inaugural meeting in March, some did so less than willingly. In marked contrast to the enthusiasm expressed by the project's founders, they reluctantly agreed to participate. Friedman

commented,

There were a few people who willingly volunteered, like Richard [Turner] and Glenn [Terry]. I mean they jumped all over it. Dr. Elliot was good about volunteering his time too. But some of the folks were "Just another god damned TQL team, and nothing is going to happen out of it. Nothing is going to work. I'm wasting my time."

Kanter et al. suggest a possible reasons for some members' lack of enthusiasm.

Using a three-step change model based on Lewin's work, they explain that those who initiate a change project are typically involved in the unfreezing stage of the change model, which is the stage when people separate from the past and recognize that the old way of doing business is unacceptable. People involved in the unfreezing stage are the process innovation instigators and visionaries. (Kanter, et al., 1992)

Elliot, Terry, Turner, and Friedman brought the innovation project into existence because they were enthused with the prospect of changing what they viewed to be an unacceptable process. Other team members, however, had no role in the project's initiation and had not yet separated themselves from the old process. Subsequently, they did not view travel management reengineering with the same enthusiasm as the project's founders.

According to Michael Beer (1988), dissatisfaction with a particular process creates the motivation for people to change. Elliot, Terry, and Turner had studied the School's travel management process and saw how it performed relative to the AFDW travel management process. Their work prior to joining the travel reengineering team convinced them that the existing process was unsatisfactory. When they were asked by Friedman to join the project, the other team members had not yet studied the entire travel management

process nor had they had the opportunity to see the AFDW process. Therefore, the other team members were less likely to be dissatisfied with existing process and, as a result, less likely to be motivated to join the team.

4. The Team Meetings Begin

The team began meeting for two hours a week on 07 March 95. Terry described what happened during the team's first meeting:

When we first met, the first thing that everyone said was "flow-chart the old process." We said, "No, let's not flow chart the old process; we [Turner and Terry] have already been down that road." We took our work, where we documented the time and cost associated with the old process, and a JWTC travel management system flowchart previously done by two other students and walked everybody through the process.

Because they relied on Terry and Turner's previous work, on 21 March the team felt that they knew the existing travel management system well enough to begin thinking about ways to design a new process. They had dedicated approximately four to six hours to understanding the old travel management process.

Although there is no definitive measure that indicates when an old process is sufficiently understood to allow designing a new one, the analysis of the old process should be broad enough to describe the systemic nature of the existing process (Davenport, 1993). This was particularly true for the travel project because travel management interacted with a number of other processes at the School. In addition, the School's travel management policy had to meet certain DoD, and federal regulations. Friedman, however, later admitted that the team did not gain a sufficient understanding of the old process:

You think that you have the process fully flowed out. I'm still learning that we don't know our process a hundred percent Somebody else is popping something up in front of you: "Well, yeah, you flowed it out, but that's not really the way that we do business." So it's almost to the point that by us not knowing our processes, that we can't define our processes That has been a major barrier, that we don't know what the hell our processes are around here We have no waivers [requests to deviate from mandated procedures or guidelines] in the system. It's because people have to know what they want to waive in order to waive something. We don't know our instructions, so we don't know what the hell we want waived.

Sometime during the first three meetings, the team attempted to assign people to certain positions. Friedman designated the TQL Office representative as the team's facilitator, but according to Terry, "He [the TQL representative] never did much facilitating." In addition, the team decided that LT Ferguson, the PSD OIC, would act as team leader. Terry and Flood, however, said that Friedman actually ran the team meetings. The team also approved its charter during the 14 March meeting. This charter explained that the team's goals were to automate the process when possible, remove unnecessary control points, and improve customer satisfaction.

H. DESIGNING THE NEW PROCESS

1. Creativity and Idea Generation

Designing the new system is one component of Davenport's fifth process innovation step. Davenport (1993) describes brainstorming as an effective part of the design stage, and he adds that brainstorming sessions should be characterized by a non-judgmental atmosphere that supports creativity and idea generation. Team members and the team's minutes indicate that Friedman actively solicited each team member's ideas and opinions during the design stage.

This atmosphere of creativity, however, did not apply to the selection of the Travel Manager Plus software, which would eventually be used in the new process. Although Friedman expected the team members to participate in laying out the new process, he did not involve them in the selection of the software that would be instrumental in providing the new process some of its functionality. Not only did Friedman not include all of the travel team in the software selection process, the project's founders who were participating on the team made this decision sometime before the design stage began. During a discussion concerning the software selection, Flood said,

When I got into the travel management team [14 March], it had already been in place. I'm not too sure for how long, so I kind of came in after it had already started. That [the decision to use Travel Manager Plus] was already in place.

Following the project's design stage, Terry admitted, "I don't think that there was a doubt in our mind, even before the project started, that we would use some version of Travel Manager."

The project's founders chose the Travel Manager software package because, according to Terry, it appeared to work for the Air Force and was available through the GAO catalogue. Davenport (1993) states that organizations need to identify IT enablers early in a project, but he also warns that software packages that are chosen before the new process design is complete may not even support the new process design. The fact that AFDW, which has a mission, organizational structure, and set of constraints different from those at JWTC, was able to use a tailored version of Travel Manager does not necessarily mean that the JWTC would be equally successful. Elliot may have been correct when he

said that Travel Manger Plus appears to be the “best of the breed,” but it is also possible that the travel team could have collectively chosen a better software package after the completion of the new process design..

2. Signs of Resistance during the Flowcharting of the Ideal Travel Management Process

Friedman and Terry agreed that the travel reengineering team began the design process by first flowcharting what they perceived to be the ideal travel management process. From an organizational change perspective, as Friedman began to flowchart the new process and worked to lead the team through the design process, he was attempting to initiate the changing stage of Lewin’s three-step change model. Kanter et al. (1992) state that the changing stage occurs when the organization, or in this case, the team, begins to unite and move towards a new future.

Although planned-change theory suggests that a concerted effort to create something new should typify the design stage, the opposite happened at JWTC. Following the 14 March meeting, which marked the end of the team’s design efforts, the team meetings began to be characterized by a state of passive resistance. For example, during the 21 March meeting, Friedman asked Master Chief Bob Hutton, a Disbursing Clerk from PSD, and Flood to attend the next meeting with some additional details concerning PSD and Accounting Department travel management controls. PSD’s inputs in the design process were valuable because that office was responsible for ensuring that post-trip voucher payments were correct. The Accounting Department was responsible for ensuring that academic departments operated within their travel budgets and the

appropriate funds were obligated and expended for travel. At the next meeting, however, Flood and Hutton had not acted on Friedman's request, and Friedman had to again ask for their cooperation in obtaining the information.

This was not an isolated incident; Terry claimed that it was fairly common to have to repeatedly ask team members for assistance and information. The minutes for 20 April, which was the date on which the team finished flowcharting the proposed ideal process, stated that attendance was low. Terry added that this also was not an isolated incident and that it had become common for certain team members to miss meetings.

Although Hutton said that he had no qualms with participating on the team, Flood openly admitted that she had reservations about her involvement with the project. During one design meeting Flood told Friedman that her position within the Accounting Department and her assignment to the team created conflicting demands. Terry recalled the incident: "She told him, 'I understand where you are coming from, but I'm also taking direction from above [from the Accounting Department].'"

In Bridges (1990) three-step change model, individual transition does not begin until something old is stopped or, as Kanter et al. (1992) explain it, there is a separation from the past. The process design phase defined how extensively the new process would change the past travel management process. This fact explains why some team members' resistance increased as the team went through the process of designing the ideal process. As the team came closer to the completion of the ideal process design, team members who were involved in the operation of the old travel management process gained a greater understanding of how their work with the team could possibly affect them and their offices

and departments. The emerging details of the new process specified what was likely ending and created the resistance that Bridges associates with transition.

3. The Ideal Process

If fully implemented, the new process finally designed by the team would create substantial changes in the way JWTC manages travel. Appendix A, which is based upon the work of Terry and Turner, outlines the team's completed proposed process. The following section describes the flowchart in Figure 2. and provides a more general description of the proposed travel management process:

- Once fully implemented, the new process would begin when a traveler requests a trip by entering her trip information into the Travel Manager Plus software package.
- A Commercial Travel Office (CTO) electronically receives the trip information and generates a cost estimate for the trip. The CTO then electronically sends the trip's airline, lodging, and rental car cost estimates to the traveler's departmental director.
- After reviewing the trip's total cost estimate, which the software computes, and checking the accounting database to ensure that sufficient funds are available, the department chairman can choose to either approve or disapprove the requested travel.
- If the travel request is approved, the software updates the accounting database, and the CTO receives the approved request.

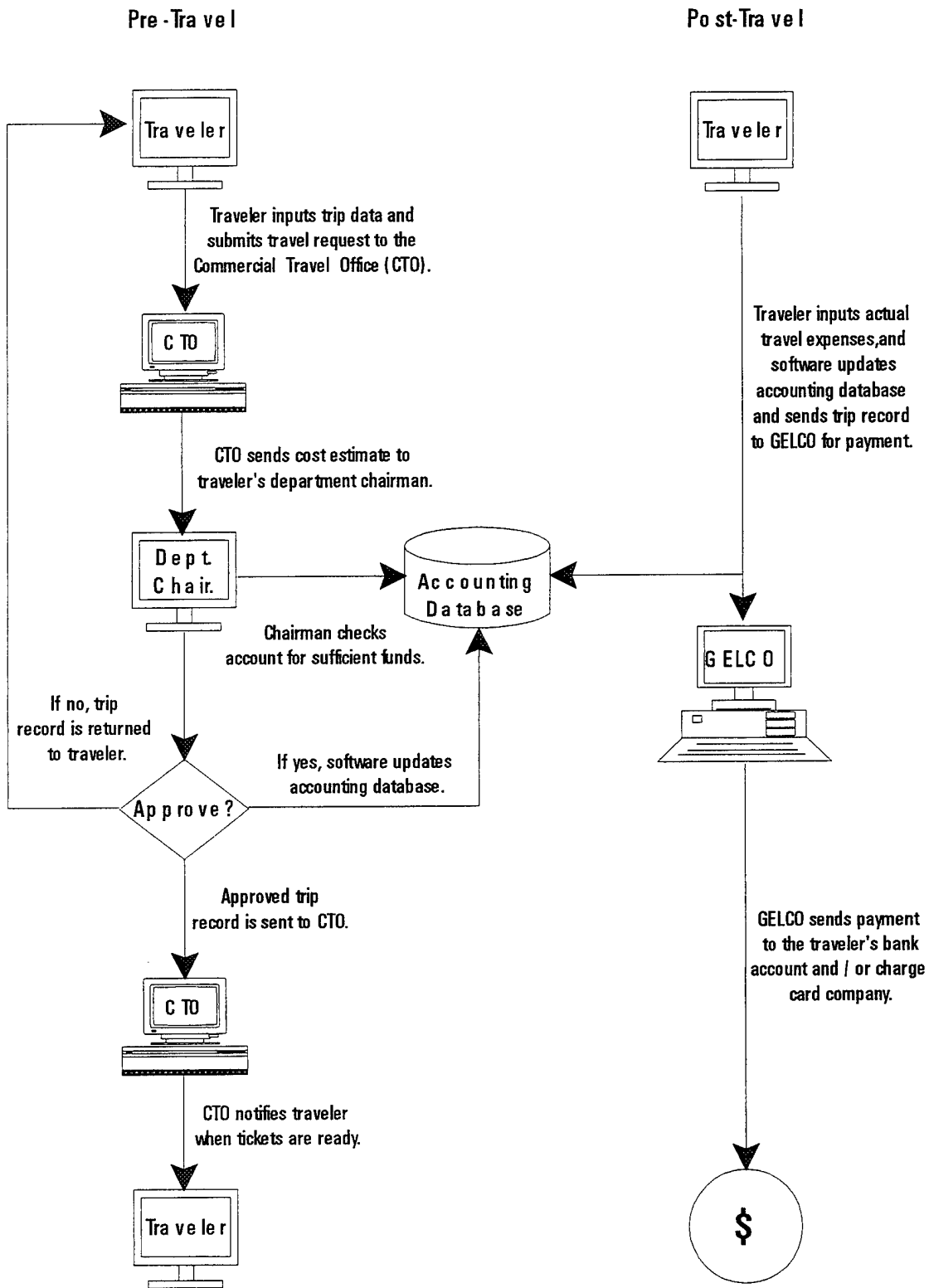


Figure 2. Simplified Version of the Proposed Travel Management Process

- The CTO then confirms the traveler's reservations, purchases the tickets using the traveler's government charge card, and electronically notifies the traveler that their request has been approved.
- After the trip, the traveler enters the actual expenses of the trip into Travel Manager Plus. If the actual travel expenses are within specified limits, the software updates the accounting database and sends the trip record (the travel voucher) to a contractor for payment.
- Once the trip record is sent for payment, the software has the accounting database designate the applicable funds as expended. With the proposed process, GELCO government services, a private company, would use Electronic Funds Transfer (EFT) to credit the traveler's bank account. The traveler would also have the option of having GELCO send a portion of the post-trip payment directly to the charge card company.

If this process were fully implemented, it would require an interface with the Accounting Director's accounting database and would place the responsibility for managing travel funds at the departmental level. It would also eliminate the need for a Personnel Support Detachment to be involved in voucher payments and receipt storage, and it would make the retention of departmental travel clerks questionable.

While these changes are significant, Terry felt that the team could have proposed more. Although the School is currently contractually bound to use the services of SATO, the School's Commercial Travel Office, Terry suggested that perhaps it was not necessary

to involve a CTO in the travel management process. He felt that it would have been possible to design a system that allowed travelers to make their own plane, hotel, and rental car reservations without using SATO.

I. REFINING THE FLOWCHARTED PROCESS AND MOVING TOWARDS IMPLEMENTATION

Davenport (1993) lists prototyping as the second part of his fifth step, and he describes it as an iterative process that attempts to accomplish a fit between a new process structure, information technology, and the organization. The travel management team did not complete a period of prototyping before attempting to implement the new process in the test departments. Instead, the team intended to use the test departments as platforms for prototyping before carrying the implementation further. Nonetheless, the team did attempt to address the relationship between its ideal process, the organization (which included JWTC and the DoD), and technology before implementing the new process in the test departments.

Friedman wanted to have the team assist him in implementing the process that they had just flowcharted. He knew, however, that there were still a number of issues that needed to be resolved before the team could finalize its travel management process design.

The issues that still required the team's attention included:

- obtaining support from the Director of Resource Management, the Accounting Department Director, and the School's ESC,
- modifying their ideal process to meet the requirements and regulations imposed by the Navy and DoD,

- and, determining how to fit the Travel Management Plus software into their new process.

1. Seeking Support from the Organization

Support for the Accounting Director's office was necessary for two reasons. First, the team needed the Accounting Department to assist in purchasing the new software. Second, the Accounting Department personnel had a stake in how the project proceeded because they were responsible for overseeing the current travel management process. Consequently, on 4 May members from the travel team briefed the Accounting Director, Bill Jensen, and Jensen's boss, Colonel Kendall, on the proposed process.

Terry recalled that the team wanted to "present the idea that his office [the Accounting Director's] would not have to sign off on [approve] every travel order." The School's Accounting Director, however, felt that his office would always need to approve travel. Terry says that it was during this briefing that Bill Jensen remarked, "That will never happen while I'm here." (It is unclear whether Jensen intended his remarks to be a threat or a prediction.)

Jensen was not opposed to using an IT system as part of the new process. Prior to the team's briefing, his department had already purchased the Financial version of Travel Manager. Terry says that the difference between the two groups was primarily over how the software would be used:

There wasn't much difference between the older, Financial version of Travel Manager and Travel Manager Plus [which is what eventually gets installed in the test departments]. The real difference is in how we intended to use Travel Manager Plus; we were going to use it with a reengineered process.

During the 1980s, the School used a travel management process similar to the team's proposed process. That process also had travel approval authority at the academic departmental level. According to Jensen, the School initiated the current travel management system because of a 1986 Inspector General report that listed a number of problems with the School's travel management system. Jensen stated that these problems included fraudulent thesis travel and uncompleted travel vouchers. Jensen felt that his office gave order and control to a process that would otherwise be abused.

A difference in process vision also accounts for Jensen's reluctance to endorse the project. Friedman, Terry, and Turner envisioned a process that would eliminate all unnecessary steps, and the proposed process treated the Accounting Director's approval of every travel request as an unnecessary step. Jensen, however, did not want a reengineered process. Jensen described his vision this way:

What I wanted was to get the orders here, where I could approve them, but then the DoD task force got started. Then we kind of stumbled on the damn thing. The whole problem with the DoD task force was that they were looking for a 500 percent solution.

Jensen felt that the project team was simply responding to DoD guidance, and as a result, were being overzealous in their attempts to change the travel process.

The team also briefed the School's Executive steering committee on 10 May. Major Friedman said that the team basically presented their proposal and made it clear that if they were to proceed with the project, it was going to start costing the School money. Friedman said that following their brief, the ESC gave the team permission to proceed with the project. Shortly after this brief, Colonel Kendall became the project manager, and

he quickly designated Major Friedman as his project coordinator.

Although the ESC gave Friedman permission to continue with the project, the committee did not give Friedman a time line for the project. The ESC's approval allowed the team to continue with the project, but the ESC offered no additional support. According to Terry and Turner, "During the brief, the ESC voiced support for the project, but offered no tangible resources."

The ESC was also unwilling to direct that the School's administrative departments commit the personnel resources that Friedman felt was necessary. Beginning with the design phase, Friedman felt that the ESC should have mandated that team members spend more time working on the project than the allotted two hours per week. Months after this meeting with the ESC, Friedman recalled his frustration:

And that's a lack of commitment on all teams at JWTC. We cannot get the ESC to come out with a statement saying that, if you belong to a TQL team, or a reinvention team, or any other sort of team at JWTC, the team leader has you for, let's say, half your work week or one day of your work week.

Terry also believed that the head of the ESC, the Commanding Officer, should have been more active in assisting the team. Because implementing a new travel management process would cross a number of functional boundaries, the project needed strong support from the School's senior leadership. Terry complained,

If you had someone above them [the Director of Resource Management and the Director of Computer and Information Services] that was the true champion of it, making it happen, saying "Okay, What are the problems? Lets get to a solution," if you had someone driving it from above that really had a stake and was involved in it, I think it [the project's development] would happen quicker. I think the General is the logical champion for the program, and General Mitchell didn't exactly step up and take charge.

The ESC did not view the travel reengineering project as fulfilling an urgent need, and this fact affected their attitude towards travel management. It also decreased the likelihood of the project's success. In contrast to continuous improvement programs, Davenport (1993) points out that successful process innovation depends on a top-down leadership approach.

Dr. Hendrick, who had been enthused by the prospect of making the travel management process "better, cheaper, and faster," thought that the project's founders were at least partly responsible for the amount of support that the travel team received. He felt that those who were involved with the project from its inception should have done more to impress upon the School's senior leadership the importance of the travel reinvention project. According to Hendrick, "We did not sell this as a high priority to the General, the Director of Academic Instruction, and Kendall. We needed to say that we want this to work."

2. Government Regulations

In order to reduce paperwork, the travel team flowcharted the ideal process under the assumption that the new process would allow the use of electronic signatures. The approval of electronic signatures would allow travelers to endorse travel documents by providing input to the software instead of hand signing travel paperwork. If, however, the use of electronic signatures was not approved, then the new travel management process would have to continue using paper copies of some documents in addition to the electronic documents produced by Travel Manager Plus. Friedman also wanted the new process to eliminate the requirement for the government to continue its current policy of

storing vouchers and receipts for seven years.

Although the team recognized these potential obstacles, they were eventually resolved through JWTC's designation as a one of 29 DoD travel pilot sites. For example, in November the federal government granted the Pentagon permission to change the threshold value of non-lodging receipts submitted with vouchers to \$75 (Hudson, 1995). This rule change meant that the Navy no longer had to require that travelers turn in receipts greater than \$25 with their travel vouchers. Friedman also noted that sometime after November, the IRS permitted DoD travel pilot sites to allow travelers to hold on to their own receipts rather than turning in receipts with their travel vouchers, which were then stored for seven years. In January 1996 the GAO approved Travel Manager's electronic signature capabilities for DoD travel pilot sites. Each of these policy changes was instrumental in shaping the travel management process that Friedman would eventually implement in the test departments.

JWTC's April 1995 DoD travel pilot site designation, however, also introduced some additional work for the team. Now the team not only had to ensure that its new process would satisfy current federal regulations, but it also had to reconcile its new travel management process against DoD and DoN travel reengineering guidance. At its 02 May meeting the team compared its proposed travel management flow chart to the DoN recommended flow chart. Although there were differences between the two, Friedman said that he and the team felt confident that the team had produced a process that was consistent with DoN travel reengineering guidelines.

Because the JWTC travel management reengineering team had already designed what it perceived to be the ideal process prior to receiving instructions from the DoD travel reengineering task force, Friedman, Terry, and Turner at times viewed the DoD's involvement as an impediment to their project's development. On 03 May Friedman told the JWTC team that, although the School would be allowed to pick its own travel management software, the DoD travel task force expected each command to prepare a travel baseline study before transitioning to a new process. The DoD intended for the baseline study to provide a basis of comparison between each command's original and reengineered travel management processes.

To develop the baseline, the DoD wanted JWTC to attach a survey to each travel management document that would ask personnel involved in travel management to document how they supported the process. Because Terry and Turner had already performed a similar analysis, Friedman felt that the DoD's request was a waste of time. Therefore, Friedman chose not to involve the team in developing the DoD's requested baseline study. He instead sent the DoD task force a response that according to Terry said, "We are not going to do it [a new baseline], but here's this [the work done by Turner and Terry]."

3. Obtaining and Fitting the Travel Manager Plus Software to the Redesigned Process

Major Friedman met with Colonel Kendall on 06 June to discuss the project and place a conference call with Federal Software, which was purchased by GELCO, concerning the contracting of the Travel Management software. Even though Major

Friedman had decided that the reengineered Travel Process would rely on some form of the Travel Manager software, the team still had a number of technical and implementation issues that needed to be resolved. For example, it was still unknown how to build an interface that would allow Travel Manager Plus to work directly with the Accounting Director's accounting database. In essence, the team spent much of May and June attempting to determine how to best implement an IT solution. The question that was asked at this point was how the functionality provided by Travel Manger Plus would fit into the redesigned process. Elliot points out the dilemma faced by the team members in attempting to apply Travel manager Plus to their solution:

It's always difficult to get a packaged program and plunk it down into your system. The interfacing problems with something like travel management are fairly complicated. And travel management [Travel Manager] seems to be the best of the breed, but it's not complete; it doesn't, right now it doesn't have access to schedule databases or the price of airfare and that sort of thing. So, in order to solve the long term problem, we need some additional components in Travel Manager. The intention is to get them to have a direct input and interface with an airfare data base, direct link from Travel Manager into our accounting system, but we are a long way from doing that. Those are difficult problems.

Although the team was ready to purchase the software for the redesigned process, Major Friedman waited until after the DoD travel reengineering task force meeting to begin purchasing the software. The DoD Travel Reengineering Conference was held 26-29 June in Springfield, VA, and both Turner and Friedman attended the meeting.

Friedman stated,

At that point, we were almost ready to start buying software and stuff right then, but they told us to hold off until after the conference. We went to the conference. They gave us some information. We basically got approval. Well so to speak, we really didn't need the approval, but they told us not to

put the brakes on any thing that we've done, and to press on.

After the conference, Friedman provided the team the Statement of Work (SoW) for the software contract. Team members were given during the 11 July meeting an opportunity to review the SoW, which was primarily a product of Friedman, Terry, and Turner's efforts. The actual order for the software was not sent out until August.

Because the team had designed the new process to work over the campus's Banyan Vines network, they needed additional technical assistance from either Computer and Information Services, or the Resource Management technical staff. According to Elliot, the original intent was to have Resource Management support the Travel Manager Plus installation, but they lacked the technical expertise to support the project's implementation. Elliot, however, stated,

We hadn't worked it out very well: the responsibility between the user side, in this case, the Resource Management organization, and Computer and Information Services, . . . but we haven't clearly defined what technical role they play and what technical role we play.

Terry blamed the lack of clearly defined technical roles as one reason for what he perceived to be the project's slow progress. He felt that the Computer and Information Services organization should have taken the lead in installing the software and necessary interfaces. While suggesting ways to improve the project, Terry commented,

I'd like to see Computer and Information Services Department more involved in the way of just making things happen without worrying what are the consequences of who should be doing what and are they going to upset another department if they step up and do this. They seemed to be concerned about you know, "this is really the Accounting Director's responsibility. Shouldn't they be in this part? We don't want to step into it when they should be doing that. We don't want to offend them." I'm not sure what all the conflict, or tensions between those two departments is but

I'd like to see the Computer and Information Services Department say, "Yes we can do that," and just make something happen without regard as to whether it will upset the Resource Management Director, or should they be doing it, or should the Resource Management Director be doing it. Just get something done.

Davenport (1993) stresses that process innovation requires strong direction from senior management." If this direction had existed, Elliot would likely have been more inclined to take action regardless of that action's impact on another department. Elliot did not work for Kendall, nor did Kendall work for Elliot. They both worked for the Commanding Officer. Therefore, if there was a question regarding implementation responsibilities, the Commanding Officer should have clarified who was responsible for ensuring that the Travel Manager software could operate over the campus-wide Banyan Vines network.

4. Growing Frustration and the Decision to Disband the Travel Reengineering Team

Although there were a number of tasks that needed to be accomplished even prior to testing the system in the test departments, the team decided that their weekly meetings were no longer required. For example, the team had intended for a software company to develop an interface between Travel Manager Plus and the Accounting Director's accounting database. Before a contractor could design an interface that would allow Travel Manager Plus to access and modify the Accounting Director's accounting system, JWTC needed to be able to accurately explain the structure of the database. The team, however, had been unable to locate sufficient corporate knowledge or documentation within JWTC to allow a contractor to develop the interface. Even with this and other

issues left outstanding, the team decided that it would be sufficient for them to meet on an “as needed basis” and use e-mail to provide updates.

There was never an official announcement that the team meetings would stop, but following the 11 July meeting, the frequency of the meetings and the involvement by old team members in those meetings decreased. At least one team member felt that the team’s work was in fact done and that there was nothing else to be gained by continuing the team meetings.

I [Flood] think that it was just decided upon that at one point there wasn’t too much more that we could do or discuss. It was more based on what GELCO [the software provider] could do in getting the software to us and getting the departments going on it, you know trained or whatever else was involved.

Flood believed that there was nothing for the team to do at this point. She assumed that the remaining implementation issues were primarily the responsibility of GELCO, the contractor responsible for Travel Manager Plus.

It is also possible that the weekly meetings were terminated because Friedman was upset by the team’s performance. Major Friedman had been growing increasingly frustrated because he felt that it was becoming too difficult to get the team members to perform their assigned tasks. While discussing Friedman’s decision to stop the meetings, Terry recalled, “Friedman said that he didn’t feel that the group was that productive.” Friedman later attributed part of the team’s performance to a lack of support from the School, commenting, “The School thinks that the reinvention thing is great, but there’s no dedicated people . . . and there’s been no training.” Friedman then described how he would have preferred the team worked:

As a team leader, I want to be able to task those individuals for eight hours of their work week, which is only a 20% commitment . . . But in reality, even if I could as team leader get somebody 50% of the time, that would be a significant improvement, but if you really, really, honestly want to see improvement, what you need to do is have a team leader, and he pulls those people out of those departments, and they work on that project. That level of commitment is no where near here.

There is also evidence that Friedman felt that if he wanted something done, he would have to do it himself. For example, although Friedman had been willing to use the team as a means of responding to request and directives from the DoD and DoN travel groups, he was becoming increasingly willing to forgo assistance from group members and proceed on his own. Terry said that he knew that there were additional taskings from the Navy travel group, but "he [Friedman] didn't let anybody know what was going on in the Navy [travel] group." Friedman's own comments allude to the fact that he felt that he could not rely on others for assistance:

The follow up around this organization is dismal. If you are not physically - you can call them up on the phone or send them e-mail - but if you are not physically standing at their door, or in a lot of cases, jumping up or down on their desk in order to get what you need, they'll blow you off.

Terry and Turner, who continued to assist Friedman after the team disbanded, were also unhappy with the manner in which the project had proceeded, and they placed most of the blame on the School's senior leadership. Prior to their September graduation, they wrote in their thesis an assessment of the project:

In general, JWTC did not allocate adequate resources to the strategic planning, design, or implementation of the travel reinvention project. The travel reengineering team was essentially an ad hoc work group with no guidance, vision, or direction from a steering committee. The travel reengineering team was responsible for analyzing the current travel system and designing, procuring, testing, and implementing a totally new system.

The team attempted to do this by meeting approximately two hours per week while spending the remaining 38 hours of the work week at their "real" jobs.

While their remarks do not specifically address the team's productivity, they do indicate that Terry and Turner thought that the School did little to positively influence the commitment of team members. Without a firm commitment from other team members, it is understandable why Friedman felt that he could not rely on the team.

Terry, however, did not agree with Friedman's decision to stop the weekly team meetings. Prior to the 11 July meeting, Friedman met with Terry and Turner to discuss the possibility of terminating the weekly meetings. Terry says that he felt uncomfortable with the idea:

Frankly, I disagreed with the idea, but Richard [Turner] agreed. After that, he [Friedman] was really in a horrible position. Essentially you had a Lieutenant Colonel select working on the project with no personnel resources. Even after graduation, I didn't work for him. I worked for Dr. Elliot, and I really didn't have to do anything for Friedman.

5. The Selection of the Test Departments

In addition to deciding to terminate the weekly meetings, on 11 July the team agreed that they needed to set up meetings with the three test departments. These three departments were initially International Relations, Information systems, and Communications Systems. The team agreed that it would be best to have a separate meeting with each of the departments to discuss test plans. LT Ferguson and Major Friedman agreed to work on setting up the meetings with the individual departments.

The Accounting Director's office controlled the selection of the test sites. That office chose the Communications Systems and Information Systems departments because

those departments are relatively small and had travel administrators who had used the Financial version of Travel Manager. The Director did agree to the team's request to also use International Relations as a test department. Terry says that they felt that the International Relations Department was a suitable candidate because of its size and the fact that their travel clerk, Sharon Howell, was a member of the travel reengineering team.

6. The Initial Meetings with the Test Departments

Friedman, Terry, Turner, and Ferguson began their meetings with the departmental test sites in July. On 27 July, Friedman, Terry, Turner, and Ferguson met with the International Relations Department's secretary, who was the acting travel clerk, and Director to discuss the use of Travel Manager and the new responsibilities involved with its implementation. Terry claimed that they began with the International Relations Department because they assumed that it was going to be one of the first test sites; however, because the department's secretary later moved to a different department, the International Relations Department was eventually removed from the test site list.

Friedman and Ferguson also gave a general briefing to the other test departments. These briefs were not yet intended for the department's instructors. Terry said that the purpose of the briefings was to present "the basics, the idea is we want to use you; we want to use your department in our test plan." Turner and Terry referred to this phase as *marketing*.

In September Major Friedman continued briefing the test departments on implementation issues. The briefs centered around providing the test departments with a status of the project and an approximate implementation time line. Friedman also

discussed some proposals on simplified entitlements and how these might affect the travel management system.

Although Turner left the School following his and Terry's September graduation, Terry remained to work on the project. He and Friedman had the Travel Manager software installed on a set of computers at the School in October, and, during the first week of October, they held a system administrator course at the School for the test departments' administrative assistants responsible for travel. At this point the test departments still consisted of International Relations, Information Systems, and Communication Systems Departments.

7. The Test Plan

Because JWTC's travel reengineering project was a pilot program belonging to the larger DoD travel reengineering program, the School had to provide the DoD program coordinators an outline of the School's test plan. On 01 November, Colonel Kendall sent the DoD travel reengineering task force the School's travel reengineering test plan. The plan did not detail how testing would proceed, but it did contain a test objective section that outlined the purpose of the new system and how it was supposed to operate. This section of the test plan came directly from the research of Terry and Turner.

The plan included a list of travel reengineering team members who would be responsible for implementing Travel Manager, but these team members never met as a group. Members of the team did continue to work on the project. However, Terry and Flood agree they never held formal group meetings similar to the team meetings held during the projects early stages.

According to the test plan, Roberta Lopez, who had been working with the Accounting Director's old Financial Version of Travel Manager, was to begin working for Major Friedman. Because Lopez was familiar with the Accounting Director's automated accounting system and the older version of Travel Manager, Friedman needed her assistance if he was to continue with the new system's implementation. Friedman wanted Lopez to verify that the software was operating correctly, assist in the installation of the software in the test departments, and hold end-user training.

Lopez, however, retained some of her responsibilities within the Accounting Director's office. As the system administrator for the Accounting Director's automated accounting system, she was also needed to keep that system operational. Therefore, when the Accounting Director's automated accounting system began to malfunction in early November, the Accounting Director had Lopez devote her efforts to fixing the Accounting Department's system. According to Friedman, "She got pulled basically off of Travel Manager to fix the local accounting system, and we basically couldn't proceed any further."

Although Friedman understood that Lopez was needed to repair the Accounting Director's system, her temporary departure demonstrates why he frequently complained about not having adequate personnel resources. Beginning with the first team meetings, Friedman felt that he could not rely upon the School to provide him with assigned personnel who were sufficiently dedicated and skilled in creating a new process. As a result, Friedman came to expect that he could only rely upon himself, Terry, and Turner. While discussing his experiences with the project, Friedman explained his situation this

way:

We have not got that commitment, and we've been asking for it for over a year. That's why, essentially, what it boils down to is that the military has acted as free labor in this. I'm not saying we have done everything, but we have done the bulk of the work. The creation of the test plans, the creation of the briefs, creations of any other paperwork that needed to be gotten. Correspondence, statements of works, all that stuff has been pretty much handled by the three of us on the military side of things. But again, not totally. But the vast percentage.

8. Testing

Friedman and Terry met frequently with Lopez in December. Using the software that had been installed in October, they attempted to determine if they could find any problem areas with how Travel Manager was functioning. Travel Manager Plus had still not been installed in any academic departments at this point, but Friedman explained that they were busy familiarizing Lopez with the software and ensuring that it operated correctly:

Basically Glenn and I took her [Roberta Lopez] in hand and set her down, and we started going through bunches of stuff with Travel Manager. We went through the routing stuff to check it out, we went through the computational module, did some scenarios, and had PSD check some of those out. Everything looked good there. And we also did some budget module checks.

The purpose of this early testing was to use Lopez's expertise to ensure that Travel Manager Plus would accurately route and compute travel accounting data.

J. IMPLEMENTATION BEGINS

1. The Reaction of Instructors to the Proposed Process

Prior to implementing the new system within the test departments, Friedman scheduled end-user training for the test-department instructors. Friedman attempted to explain during these training sessions the concept of the new process. He also wanted to describe the new procedures instructors would be expected to follow as part of the new travel management process.

Although the instructors had not yet used the new process and software to manage a trip, Friedman began to encounter early signs of resistance from the instructors. Friedman thought that it was important to train the instructors because in the process designed by the team, instructors would be using the software, not departmental travel clerks. However, according to Friedman, some instructors were not eager to adopt the new method of managing travel:

We've given three briefs in the Communications Systems Department, and not even all the instructors in the Communications Systems Department came to the briefs. We had one instructor get up and walk out because he didn't want to have a thing to do with it. They view it as a work shift, which in a manner of speaking, it is.

2. The First Test Departments

Friedman, Terry, and Lopez implemented Travel Manager in the Communications Systems Department during the first few weeks of January 1996. Although Communications Systems was the first test department to receive Travel Manager, the department was able to successfully process travel authorizations and vouchers shortly after the installation of the software.

On 31 January, Friedman wrote Kendall that they were finishing preparations to implement Travel Manager in the Information Systems Department, and on the same date he and Terry briefed the Information Systems department on what actions they would need to take prior to implementing Travel Manager in their department. He also told Kendall that Lopez would need to continue providing the quality assurance for the installation, particularly the accounting lines within the Information Systems Department's Travel Manager software.

3. Friedman and Terry's Trip to Washington

Friedman and Terry demonstrated the capabilities of the Travel Manager Plus software by using it to manage their January trip to D.C. for a travel reengineering conference. Friedman described the performance of the program this way:

We [Terry and Friedman] sat down at our computer, created our own travel authorizations, and . . . we got back off of our trip. We entered the information. Basically what you do is from your travel authorization, you hit a key and it goes voucher from authorization, and by doing so, all you've got to do is go in and change what you actually spent . . . You add those in, and the software automatically computes the voucher for you.

Although the electronic interface between the CTO (Commercial Travel Office, which at JWTC is SATO) and the test departments still had not been installed and tested, and there was still no method to directly access the Accounting Director's database using Travel Manger Plus, their trip demonstrated that the School could begin using portions of the redesigned travel management process.

While in Washington, Friedman, Terry, and members from the other DoD test sites met with GELCO and SATO to view the software that the CTO could use to communicate with a traveler's personal computer or work station. The plan at JWTC was to have SATO use this portion of the interface to build a traveler's itinerary and generate should-cost estimates for the trip. The CTO could then send these items back to a traveler's department for review.

Terry and Friedman also discussed the performance of the School's installed software with GELCO. Terry said that they told GELCO that the School was having problems with the software budget module, including the fact that Travel Manger Plus allowed departments to overspend on travel. Although they discussed the budget modules performance at this meeting, five months later travel clerks were still complaining that the software would allow their departments to overspend.

4. Friedman's Follow-up Report

Following their visit in Washington, Major Friedman wrote in his trip report that JWTC was slated to be the test site for the CTO interface. He also added,

We also need to start laying out the ground work for displaced workers. Once we prove out the CTO [SATO] interface, our local SATO office will be able to create authorizations with the traveler over the phone. My suggestion is that once the test of the interface is complete and proves satisfactory that we require the traveler create their own travel authorization [using Travel Manager] or they create it over the phone with SATO.

Not everyone was pleased with Friedman's recommendations. Friedman described some of the responses he received as a result of the suggestions he made in his January trip report: "I'm not going to name individuals, but I've been approached by several

individuals saying, 'don't ever put anything like that in a report again.'"

Although Friedman refused to elaborate on the incident, it is possible that those who read the report were concerned that it might have created an unnecessary panic. In a February memorandum, Major General Mike Engle, who relieved Mitchell as the school's superintendent, admitted that some positions would be affected by attempts to reinvent processes at the School, but he also added that eliminating a person's employment would be a last resort to other options. Friedman's report, however, did not address other options, such as job retraining.

Friedman viewed the issue of travel clerks as being a straightforward decision to eliminate travel clerks. In the absence of prior guidance on how to address the issue of displaced personnel, Friedman felt that his written remarks were completely justified because his process vision was based upon removing inefficiencies. Friedman explained during an interview the reasoning for his suggestion:

We've got to start thinking about this 'cause this is the whole idea, folks. We've got to reduce costs. We got to start planning out this stuff. It may be a year or two before the real DoD system gets to JWTC, but, by God, when it does arrive, you are going to need to eliminate labor. We've got to start working smarter, and you don't need a travel clerk in the middle. No longer will a traveler need to go to his travel clerk to work out his travel arrangement.

Friedman described the response he received to his report as originating from fear. He also felt that the School, particularly civilian employees, were unwilling to address the issue of eliminating jobs. Expressing his frustration, Friedman remarked:

The military is in more favor of this than the civilians. The military rolls in and out. We've done our downsizing in the military. We haven't gotten to all of the civilians yet. We downsized a lot of civilians, but JWTC hasn't

downsized shit. How many staff do we have at the School? Two for every student. Isn't that insane . . . Well, all the DoD downsizing, all the VSIs, early retirement, and all that, the bottom line, guys, was that it was a RIF [reduction in force]. You mention that around here . . . well, pretty much, you don't mention that word around here. That's what we need. We need a RIF. Until somebody stands up and says we're going to RIF so many employees this year, you better get onboard. And, by God, you employees better start pulling your weight.

5. The Commercial Travel Office Interface

On 23 February Friedman reported that the School had successfully tested the CTO interface. With the CTO interface now in place and operational, a traveler or a person who handled travel management had an electronic interface with SATO. SATO could take a travelers request, load the request on to a floppy disk, put the floppy into another computer, access the SABER system, and build a traveler's itinerary using information from SABER. Travelers could also call SATO directly to request an itinerary with cost estimates be generated for them. This information could then be sent back to the traveler's office for authorization.

6. The Decision to Add Logistics Management Department as the Fourth Test Department

The Accounting Department had originally stipulated in July that the Logistics Management Department not be used as a test site. It is not clear whether the Logistics Management Department had even asked to be a test site during the July meetings, but is apparent that there was some concern about the potential problems in attempting to test the new system in Logistics Management . These concerns included the risk associated with the large size of that academic department, the volume of travel orders generated by the department, and the perceived reluctance of the department's travel clerk to acclimate

to a new system.

Although Lopez did not anticipate training Logistics Management end-users until later in the summer, Friedman said that sometime during the month of February, he and Kendall, the Director of Resource Management, decided to allow Logistics Management to be the fourth test site. Although we were unable to determine precisely why there was a change in the implementation plan with respect to Logistics Management, several factors help explain the turn around.

Both Kendall and Friedman mentioned that there was strong support for the new system from the Logistics Management Department. According to Kendall, "Logistics Management would turn it on tomorrow if we let them, if they were able to." Friedman explained that he and Kendall made the decision to add Logistics Management because "Logistics Management has pleaded and begged and said that we'll do a bunch of the work and set-up for you to allow us to come on the system."

In addition to the Logistics Management Department's offer of support, Friedman had a better idea of how the new system would operate. Therefore, the risks of implementing the new travel management process in a large academic department, such as Logistics Management, were not as great as they had been in July. The Logistics Management's travel clerk, Roberta Thomas, was also planning on retiring in April.

Roberta had worked as a travel clerk for JWTC for nine years and was content with how she was currently managing Logistics Management department's travel. According to Thomas, any attempt to implement Travel Manger Plus within Logistics Management department would have been a "waste of time." As a justification for her

reasoning, Thomas listed several factors which she felt made her department unsuitable as a test site. These included:

- Her busy schedule made it impossible to attend training sessions or learn how to use a new system.
- She was due to retire in the Spring.
- She felt that Logistics Management department was too slow in adopting new systems and procedures, and therefore the implementation of a new travel management process would represent an unacceptable loss of work hours.

With the addition of Logistics Management, Friedman had to oversee the testing of Travel Manager Plus in four departments. While describing the decision to add Logistics Management, Friedman said, "The project isn't going to go any further than four departments unless we get more money and more people because we've pretty much tapped out our resources on are software at this point." Friedman added, "So we basically doubled our test population by accepting the fourth department."

Although Friedman did not mention any failed requests for additional funding, he felt that the project was already understaffed and that the School would not willing to provide additional personnel support. As proof, he described JWTC's project relative to the National Security Agency's (NSA) travel reinvention program: "As far as level of commitment, just to give you a little bit of indication, the NSA has had a full-time staff of six people working on this for the last two years."

7. The Decision to Eliminate the International Relations Department from the Test Plan

Sometime after Friedman and Kendall made the decision to add Logistics Management, they decided to remove International Relations from the test plan. It is not clear why or precisely when the decision was made to drop the International Relations Department. Sharon Howell's involvement on the travel reinvention team was one reason why the travel team originally chose her department as a test site. Howell had transferred from International Relations to a different department, but her transfer happened months earlier. She continued to work with the team after her transfer, and the implementation plan still included International Relations.

Friedman's replacement, Captain Sally Rudman, a September graduate from the Information Systems Department, thought that the department was eliminated because they lacked sufficient computer resources. Rudman believed that the International Relations department was dropped sometime in March because "the department director didn't even have a computer on his desk." Terry, however, later commented that he thought that personnel problems within the International Relations department caused it to be dropped as a test site.

8. Friedman Transfers

Colonel Kendall identified Friedman's replacement in February. In the beginning of February, Friedman said that he was uncertain who would replace him, but added, "To tell you the truth, it will not be another military 'cause I'm an excess billet." Friedman's replacement, however, was another military member, Captain Rudman, who had been

working in the School's Computer and Information Services Department. On February 23, Kendall explained the series of events that allowed him to obtain Captain Rudman for the project:

His relief, Captain Sally Rudman, will work for me . . . we've already attrited one civilian employee based on this thing coming along. She wanted to retire so I elected not to fill the position. As a matter of fact, the money that we free up - there's no free money - the money that we free up from not hiring her will be used to hire a replacement over in Computer and Information Services to replace Captain Rudman because Friedman is not getting a replacement.

Friedman began his turnover with Rudman in March, and Rudman relieved him as the Travel Reinvention Coordinator in April. Prior to departing from the School, Friedman described to us how he viewed himself in relation to the project. His remarks summarize what he felt was instrumental in keeping the project moving:

You know, I view it as I've got the stick and the whip to keep it moving. I'm doing all the stuff: the one-on-ones with the software company to keep the guys moving, keeping SATO moving Just trying to keep an overall view of the progress of the program, and keeping everybody moving, not letting the program die, which it could die very easily if there was nobody pushing it along, both internally and externally.

K. ATTEMPTS TO ADDRESS UNRESOLVED IMPLEMENTATION ISSUES

1. Technical Issues

In addition to trying to familiarize herself with the new system, Rudman had to address a number of unresolved implementation issues. The interface between the test department's Travel Manager Plus software and the Accounting Director's accounting database still had not been developed. Some instructors did not have computers with operating systems that could support using the current version of Travel Manager Plus.

According to a message that Captain Rudman received from The Director of Engineering and Computational Studies, "95 percent of our faculty do not have a Banyan connection in their office. This means that the default mode will still be to rely on the department travel clerk." In addition, the test departments were just beginning to discover some problems with the new process. The test department travel clerks, for example, discovered that the software would not allow them to recoup travel funds from canceled trips.

To assist in resolving these issues, Rudman decided to hold regular meetings with the test departments' travel clerks. Rudman could also rely on Roberta Lopez as a source of information. After Friedman left JWTC, Lopez continued to work for the travel reinvention coordinator, working exclusively on Travel Manager Plus. However, unlike Friedman, Rudman could not rely on Terry for assistance. Terry left the School for civilian employment shortly after Rudman became the new Travel Reinvention Coordinator.

2. The Meeting with the DoD Travel Reengineering Task Force Director

On 16 April, Kate Asken met with personnel from the School who were involved in travel reengineering. Ms. Asken was the DoD Travel Reengineering Task Force Director. Commander (CDR) Joseph Tasner, the DoN representative on the DoD Travel Reengineering Task Force, accompanied Asken on her visit to the School. The following personnel from the School attended the meeting with Asken and Tasner: Rudman, Whitaker, LT Dolores Silber (who replaced Ferguson as the PSD OIC), Jensen, and three students.

Ms. Asken and CDR Tasner provided the group general information about the DoD's efforts to reengineer the travel management process. They were also interested in learning how JWTC was progressing with its local efforts, and they wanted provide any additional information or guidance that would clarify implementation policies that the school found confusing. For example, Silber told the group that her office was under the impression that they were required to perform audits on all Travel Manager Plus travel vouchers that travelers sent to PSD, which is tantamount to redoing every travel voucher calculation. Asken explained that, when using the Travel Manager Plus's computational module, it was not necessary to audit every voucher. Tasner added that he would send Silber the necessary authorization paperwork so that she would only have to perform occasional audits.

The group also discussed the technical issues which were affecting the progress of the project's implementation. Rudman informed Asken that the development of Travel Manager's interface with the Accounting Directors accounting system had been delayed and that the reason for this delay was that the Accounting Director expected to change to another accounting database system. Rudman then briefed Asken on the different electronic funds transfer (EFT) payment options for travelers that the School was considering.

L. THE RELATIONSHIP BETWEEN THE NEW TRAVEL MANAGEMENT PROCESS AND THE END-USERS

1. Proposed Changes in the Relationship Between Instructors and the Travel Management Process

Under the old travel management process, instructors picked up a travel request worksheet from their department's travel clerk. They then completed specific portions of the travel request and returned the worksheet to their travel clerk. The items on the worksheet that instructors were expected to complete include the following:

- personal information, e.g., name, telephone number, social security number
- funding information, e.g., job order number, registration fees, request for travel advances
- trip information, e.g., dates of travel, requested departure and arrival times, airline seating preference, destination, requests for lodging and rental car, and the purpose of the trip

After completing his or her portion of the form, a traveler had the department director approve the requested trip and returned the form to the travel clerk. The travel clerk would then be responsible for completing the form, including the trip's estimated costs, and obtaining funding approval from the Accounting Department. Although there are additional steps prior to a traveler receiving an itinerary and tickets, an instructor only needed to complete his or her portion of the worksheet prior to departing on a trip.

After returning from a trip, a traveler needed to complete a one-page travel voucher. Using the voucher, the traveler listed the trip's actual itinerary and expenses. A completed voucher allowed PSD to pay the traveler for any reimbursable expenses that

exceeded the traveler's travel advance. Appendix B contains examples of travel forms used with the old process.

To request a trip using the new process, instructors would begin by logging into the Travel Manager Plus software. In order for instructors to gain access to the program, they would first need to enter an electronic signature and password. After logging on to the system, instructors would then need to complete a series of online forms that required information similar to what they and a travel clerk had provided using the older travel request worksheets. Instructors could only access the correct online forms by selecting the appropriate option from a series of pull-down menus displayed at the top of the screen. In order to successfully complete the travel request so that SATO could generate airline, lodging, and rental car cost estimates, instructors would need to know which of the online forms and data fields were applicable to their trip.

Because the trip's anticipated cost, which is calculated by the software using per-diem rates and SATO's airline, lodging, and rental car cost estimates, might exceed allowable limits, instructors would need to periodically access the software to determine if their department director had rejected their travel request. If the travel request was approved, travelers would also need to periodically check Travel Manager Plus to determine if their tickets were available for pickup.

After completing a trip, instructors would again need to access Travel Manager Plus. They would select the program's "voucher" option by following a series of pull-down menus. Travel Manager Plus carries pre-trip data over into the post-trip voucher form. Therefore, instructors would only need to modify pre-trip cost data so that it

correctly reflected their actual expenses. Appendix C contains examples of some Travel Manager Plus screen displays.

2. The Instructor's Belief that the Process Could not be Improved

While she was at the School, Asken was also interested in hearing about organizational issues that the group felt were hampering efforts to implement the new travel management process. This discussion focused primarily on resistance from the School's instructors, and there was considerable disagreement on why instructors were unhappy with the use of the new system. Whitaker said that one problem with the new system was that the instructors didn't believe it would be an improvement over the current system: "The problem is one of trust. The trust is not there, and that's what is getting in the way. They don't trust the system not to screw up their trip." Whitaker also added, "The resistance is not necessarily towards the new system, but hatred for the current system." Whitaker felt that the instructors' resistance could be mitigated by showing them an improvement relative to the old system: "If we can get people onboard with the belief that things will get better, we will win."

According to Kanter et al. (1992), the instructors' doubts are common to change recipients. They claim that change recipients often feel that talk of change will not result in positive action. Change recipients are also likely to feel that they will have to endure the anxiety and extra effort of the change process with no definite improvement to their or the organization's situation. (Kanter et al., 1992)

The instructors' doubts help explain why so few instructors' attended the training sessions held by Friedman and Lopez. Even with classes, Friedman felt that three

meetings should have allowed most of the approximately 25 instructors in the Communication Systems Department to attend at least one training session. Change recipients, however, are unlikely to attend a non-mandatory meeting for a change that they anticipate will be unsuccessful. Lopez commented that, based on her experiences with the Communications Systems and Information Systems departments, she anticipated light attendance by the instructors during the Logistics Management Department training sessions.

After the Communications Systems and Information Systems test departments gained exposure to the new travel management process, the instructors developed a better appreciation of the new travel management system's impact. This exposure likely reinforced their perception that the School could not make the travel management process better. For example, Rudman acknowledged that many test department instructors do not have personal computers connected to the campus-wide Banyan Vines Network; therefore, these instructors continue to rely on travel clerks to assist in processing their travel paperwork. Each of the test departments still has at least one travel clerk, and these travel clerks claim that they continue to manage a large portion of the instructors' travel requirements. In addition, the Communications Systems department continues to have instructors use an old departmental paper form to request travel.

3. The Instructors' Perception that Things Got Worse, Not Better

Whitaker's assertion that the instructors do not believe that the travel project will result in a better process is valid, but the meeting with Asken also addressed another possible reason for the instructors' reactions to the new system. The group discussed the

possibility that the instructors did not like the new system because they viewed it as a work shift. Even though the implementation of the new system was incomplete, test department instructors were still more actively involved in managing their own travel than they had been previously. Tasner stated that he had seen a similar reluctance on the part of Naval War College instructors to involve themselves in processes that had, until recently, been the responsibility of the office staff.

Before he left the School, Friedman said that he realized that the project was far from complete, but he viewed favorably the changes made so far. The new process had eliminated some paperwork. It gave the test department directors the authority to obligate travel funds. It automated portions of the travel request and authorization process, and it provided for relatively prompt payment of travel expenses.

Test department instructors, however, viewed these changes from the perspective of change recipients, not as project founders or implementers. Kanter et al. (1992) state that, in addition to initially feeling that positive change is unlikely, change recipients are also likely to ask, "What's in it for us?" Change recipients want to know if their participation benefits them.

The new process would require instructors to perform additional work, but before leaving the School, Friedman said that he felt that quicker travel reimbursement would mitigate any ill feelings resulting from the extra work. According to Friedman, the new process would create a "work shift," but "it also prevents them from having to fill out the damn piece of paper [the voucher, which is required for post-travel payment] and handing it to the travel clerk and waiting weeks." Friedman was also aware that some instructors

were unhappy with the user unfriendliness of the software. He assumed that reducing the time delay between travel completion and payment also compensated for the software's weak user interface:

Well, a lot of folks view it as potentially not being that user friendly I'm not saying that it's the greatest thing. There's supposed to be a Windows version coming out here within about four to six months that will improve the user friendliness of it. But, the biggest advantage of it is that the more time you spend on your travel authorization, the less time you spend on your voucher That's the nice feature about the software, that you take your travel authorization and turn it into a voucher. That is the really super nice feature of the software.

Friedman was overly optimistic. The instructors that we talked to did not view prompt payment to be a significant improvement. To make this point, one instructor retrieved a several week old travel check from his wallet and stated, "See, I don't care about that."

Terry envisioned a system that would make the process easier for the traveler, and the Travel Reengineering Test Plan signed by Colonel Kendall lists "100% [user] satisfaction" as one of the project's goals. However, several instructors complained that the opposite has happened. In those cases where instructors have used the new process and witnessed a significant change attributable to the new process, they primarily view that change as negatively impacting them. A instructor in the Information Systems Department said that the new process provided "zero percent customer satisfaction . . . zilch, zero," and Linda Bautista, the Communications Systems Department travel clerk, explained that when instructors do use the new system, they frequently complain about the difficulty of using it.

The Travel Manager Plus software seemed to be the main source of the instructors' complaints. On May 15, we had the opportunity to witness the reaction of one instructor in Bautista's department towards the new travel management process. While Bautista was giving us a demonstration of the Travel Manager Plus software, an instructor entered the room to complain about the new system. He was frustrated that the system required him to provide an electronic signature on his travel voucher and that the required electronic signature was not identical to the signature that he normally used. After the travel clerk explained that his electronic signature consisted of four digits, which he had previously chosen, appended to his name, he responded, "How would I know that? Where does it tell me that? That's not my signature. It asks for my signature!"

Because this instructor thought that we had helped in the design of the new travel management system, he then turned to us and exclaimed, "I'm not yelling at her; I'm yelling at you!" The instructor explained that he felt that the system had been designed to help administrators, not the users. He then listed some of his specific complaints, which included:

- the software's semantics were confusing
- the lack of a user's manual
- frequent system crashes
- an increased workload for him as a result of the system's implementation

Jesse Alvarez, an instructor in the Information Systems Department, voiced similar complaints. According to Alvarez, "The problem with it [the user interface] is that it's not intuitive." He also explained that the software would occasionally lock-up causing delays

in the processing of his travel requests, and he added, "I can't get it [Travel Manager Plus] to recognize what I'm trying to do." Because the software was difficult for him to use, Alvarez said that the new process created an excessive administrative burden relative to the old travel management process:

For me to travel using the old process it would take about fifteen minutes to fill out the travel paperwork. The first time it [using the new process and software] took about one hour and 45 minutes . . . but it [using the new process and software] has never taken less than one hour of my time. It is not constructive for me to spend all of this time on this. It does not contribute to education. I don't see why we need to suck faculty out of their regular jobs and put them in administrative jobs.

Alvarez said that he wasn't opposed to the concept of changing the travel management process. He did feel, however, that for a new process to be effective, the software would need to be designed to better support the traveler: "It's a wonderful idea, but they really need to have somebody write the program that is familiar with travel." Alvarez added that given the option of using the new system or reverting to the old process, he would "rather pay a secretary out of research funds than eat up an hour of my time." He then summarized his feeling about the new process: "The concept is good, but the execution sucks!"

4. Consensus That The Instructors Were Displeased With the New Travel Management Process

Whatever the cause of their resistance, the meeting with Asken did make it clear that the instructors were unhappy with travel management at JWTC. In addition to the remarks made by Whitaker, Silber said that she frequently had instructors coming to PSD to complain about their travel payments. Although she admitted that she had some

successes with the new system, there had been other times when she had “people screaming in her office about how I’ve screwed up their trip” and “treating me like pond scum.”

5. How Others Viewed the Instructors’ Reactions to the New Process

Because those who speak out against a new process are often willing to act on their feelings, Kanter et al. (1992) warn that change strategist and implementers need to listen to the complaints of change recipients. It is not enough, however, to hear change recipients’ concerns and simply dismiss them as being irrational or self-centered. The concerns expressed by the instructors may point to serious, unforeseen flaws with the system. Bridges (1990) also warns that attempts to suppress or ignore change recipients’ negative reactions delay the effected personnel’s progression from a period of feeling loss to a period of transition. Therefore, the School should have adopted an environment where the instructors reactions were anticipated, acknowledged, and understood.

With the exception of the meeting with Asken, we did not witness any other attempts to understand the instructors’ frustration. This fact is partially explained by the initial belief that the instructors would have little trouble in using the new system. Kendall and Friedman thought that the new process would be easy for the instructors to use. Friedman stated that the new process is “not that difficult,” and in February Colonel Kendall said,

I’m not sure that I agree with that [the idea of instructors possibly resisting the new process] necessarily. You know, if you’re a instructor and all of a sudden you decide that I’m going to do my own travel orders rather than pass it to a clerk to do, than yeah, you are going to have to get a little initial training It’s relatively easy to make the thing run. It doesn’t

take a whole lot of brain power for an individual to set himself up a set of orders.

Elliot's comments had been even more positive: "There's certainly a lot of interest in getting it running. There's no lack of support from the user community."

Before leaving JWTC, Friedman said that he recognized that not all travelers were going to be happy with the new process. He stressed, however, that the test departments were part of an effort to identify weaknesses with the new process and correct them. He also stressed that customer feedback was an important aspect of correcting the problems:

The concept and software are not 100 percent yet, but the key thing that people have got to remember here is that this is a test. We are testing new interfaces. We are testing new concepts. We're testing new software. The software is still under development. I mean we are going to get customer feedback and [that] basically says, "You need to change this, [and] you need to fix this."

As the implementation proceeded, however, few people took the instructors complaints seriously. Instead of attempting to understand the reasoning behind the instructors' negative reactions, those individuals that we spoke to about the instructors' behavior attributed the instructors' negative reactions to either a lack of commitment, egotism, or inflexibility. Friedman felt that the instructors found the new process difficult to use because they were not committed to the training. Bautista, who said that she frequently had to listen to the instructors complain about travel management, blamed their attitude on their "egotistical" nature. Rudman felt that the instructors would never be happy with any system that restricted them. According to Rudman, the instructors wanted nothing but a "should cost system," a system that would only tell them how much their trip should cost and allow them the freedom to manage their travel as they saw fit. Jensen

implied that any attempt to please the instructors would have been useless: "They are never going to be happy with it [the new travel management process]."

6. The Reaction of Travel Clerks to the New Process

Unlike the instructors, the test department travel clerks were more positive in their assessment of the new travel management process and its related software. They brought to Rudman's attention software issues that they felt needed resolution, but during the three travel clerk meetings that we attended, none of the travel clerks indicated that the new travel management process made their jobs more difficult. Bautista gave the most positive endorsement of the new project. According to Bautista, the new process is "heads and shoulders above the old." She later added, "It's like being a pioneer. It's exciting to be one of the founding fathers."

Several factors explain why the travel clerks' reacted differently than the instructors. Firstly, the travel clerks were familiar with the Travel Manager Plus software interface. Although the interface had some new features, according to Terry, it was basically the same interface that had existed with the older Financial Version of Travel Manager, which the Communications Systems and Information Systems travel clerks had before the new process was designed. Secondly, the Logistics Management travel clerk who attended the travel clerk meetings with Rudman had little prior experience with managing travel. He was unfamiliar with how the old travel management process operated. Therefore, his use of the new travel management process did not conflict with any beliefs or work habits relating to the old travel management process. Finally, the travel clerks had been involved with implementing the new process more extensively than

the instructors. Not only did Friedman familiarize them with the new process before the instructors, they also had a weekly chance to interact directly with the project coordinator. Through their recommendations and feedback, they were effectively helping Rudman continue the implementation. As Bridges (1990) points out, while not a panacea, participation in the change process helps people accept change more readily.

Nonetheless, the travel clerks were confronted with a change, and this change caused some form of loss. Bridges (1990) states, however, that people vary in their reactions to loss. Therefore, the travel clerks should react differently than the instructors. Also, because the Communications Systems and Information Systems travel clerks were exposed to the new process before the instructors, they had the opportunity to move beyond the period of loss described in Bridge's three-step change model. The Communications Systems and Information Systems travel clerks may have initially reacted negatively to the new system, but we talked to them in May, at least seven months after they received their first training on the new process.

Because the new process is not yet fully implemented, there will be more changes for the travel clerks. One possibility is that they may move to a different job if the new process becomes fully implemented. Although Friedman had stressed the need to eliminate jobs, none of the test department travel clerks expressed worries that they might lose their employment at the School. According to the Deputy Director of the School's Human Resource Office, the Commanding Officer had made his policy clear, and that policy was serious about ensuring "that everybody get's trained so that we can avoid a RIF." When asked about the possibility of losing her employment at the School, Bautista

echoed the General's policy, "I'm not worried about losing my job. Then [if I lost my position as a travel clerk] I could do other things like helping the lady across the hall."

M. CURRENT STATUS

Rudman must deal with a number of remaining issues because the testing and implementation of the new travel management system is far from complete. Some of the software issues still requiring resolution include:

- the development of an interface between the test departments' Travel Manager Plus software and the Accounting Director's accounting database
- modifying the budget module so departments are not allowed to exceed their travel budgets
- modifying the interface between the test departments and SATO to allow SATO to send travelers their itinerary over the campus network instead of the current process of faxing travel clerks the itinerary.

In addition, not all instructors are connected to the campuses Banyan Vines network.

Because Travel Manager Plus relies on the campus's Banyan Vines network to transmit travel requests, itineraries, authorizations, accounting data, and vouchers, connection to this network is important if every instructor is ultimately to use the system from their offices.

Friedman had hoped that eventually PSD would not be a part of the travel management process. Even if PSDs are phased out of existence, a new travel management system would have to rely on third-party payments and Electronic Funds Transfer (EFT) mechanisms before Friedman's aspirations could become reality. Rudman, however,

points out that the "DoD has been sitting on its hands with EFT." Therefore, Rudman is waiting for the additional guidance from the DoD and the DoN that would allow her to incorporate EFT into the new process.

When the Accounting Department completes its new accounting database system, Rudman or her replacement will need to determine if GELCO should develop an interface between the Accounting Director's accounting system and Travel Manager Plus. Of course by the time that this decision is made, the DoD or DoN might determine that a completely different process and software is to be used in managing travel.

Finally, there remains perhaps the biggest challenge: people. Not only does Rudman have to worry about the instructors, she must now worry about others in the organization attempting to shape the process to fit their expectations and desires. For example, during one of Rudman's weekly meetings with the test departments' travel clerks, the Information Systems travel clerk mentioned that she was annoyed by the fact that the instructors were being told that they could call hotels and book their own reservations. She went on to say that Dr. Whitaker had told the instructors that this was allowable. Rudman responded that, due to the existing contract with SATO, Whitaker was wrong. She added, "Dr. Whitaker does not have the last say in travel." Frustrated, a travel clerk at the table then muttered, "Somebody should tell Whitaker to go. . . ."

Some senior JWTC administrators and instructors, however, have asserted that under the old system they had always been allowed to book their travel reservations. Rudman may have been correct, but Whitaker was also familiar with the travel management process and was simply restating what instructors considered to be a

longstanding policy at the School. Despite the 14 months that had elapsed since the reengineering team had finished designing the new process, personnel involved with the project were still unable to reach a common understanding about the specific details of the new process.

The Accounting Department is still not fully committed to the idea of using a new travel management process. In May, Accounting Director Jensen, admitted, "I'm very pessimistic about the whole thing [getting the new process implemented]." Although Friedman declared Kendall a "convert," Kendall's own staff still does not fully support the new process. According to Brad Copper, an Information Systems travel clerk, "Accounting Department people don't know what you are talking about when you mention travel manager." Copper also said that the Accounting Department continues to ask for paper copies of travel documentation. Recently Bautista complained:

Even though we are allowed to use multiple lines of accounting when we do travel management manually, and Travel Manager supports it [the use of multiple accounts for a single trip], they [the Accounting Director's office] will not let us do it.

Regardless of what system finally gets implemented, whoever implements the final system will have to be able manage the organizational change process and the remaining technical implementation issues. Although technical issues are relevant and can prove to be substantial, the relative success of any process innovation project relies on people for its effect. As Davenport (1993, p. 167) points out, "Organizational, not technical, barriers present the major challenges in process innovation efforts."

IV. LESSONS LEARNED

A. A CONSISTENT PROCESS VISION WAS NOT CREATED, ARTICULATED, AND SHARED WITH THE REST OF THE ORGANIZATION

1. Different Visions

Throughout the project several different process visions emerged. Both Elliot and Whitaker believed that the project needed to convincingly demonstrate that the School was capable of reengineering its processes. Therefore, one aspect of the desired end-state for Elliot and Whitaker consisted of a successful demonstration showing that the school could reinvent its own processes. Elliot believed that the project's success was a crucial first step in implementing other process reengineering projects at the School, and Whitaker said the project needed to show other organizations "... that we are ready to kick some butt around here."

As part of a successful process reengineering demonstration, Whitaker and Elliot also wanted the project to result in a more efficient process. Friedman, Turner, and Terry held a similar view, and Friedman believed that cost reductions were the primary means of measuring the efficiency of the new process. The ESC seemed to agree with Friedman when it, according to Friedman, allowed the team to proceed because of potential cost savings.

Friedman's process vision, however, included more than just eliminating unnecessary paperwork. Friedman wanted the new process to eliminate jobs. As a result, following his January 1996 trip to Washington D.C., Friedman included in his trip report a

recommendation that the School's leadership begin researching ways to deal with displaced travel clerks.

Making travel management easier for the traveler was another process vision that emerged. Terry wanted to create a new system that allowed instructors to easily manage their own travel from their personal computers. According to Terry, the travel project excited him because it would result in a process that was "not just a little easier on you [the traveler], but dramatically better" The travel reengineering test plan, which was signed by Colonel Kendall in November 1995, also indicated that the project should satisfy the needs of the traveler. The test plan said that one goal of the project was to achieve 100 percent customer satisfaction.

When the travel reengineering project began, Colonel Kendall and Bill Jensen did not want to completely redesign the travel management process. Their desired end state consisted of maintaining the existing travel management process. They simply wanted to automate portions of the existing process.

2. The Importance of Articulating a Common Process Vision

Although each process vision had its merits, the failure to formulate and then spread throughout the organization a consistent purpose for the project adversely affected design and implementation efforts. A process vision affects the behavior of those involved in a change project (Kanter et al., 1992). Therefore, it is important to have a common, relatively stable process vision before a particular process innovation project begins (Kanter et al., 1992; Davenport, 1993).

The lack of a common process vision helps explain both the reaction of the Accounting Department to the proposed changes and the effect of Friedman's post-trip report. Bill Jensen wanted to automate portions of the existing process; therefore, he resisted the idea of relinquishing his authority over travel funds to the academic departments. Friedman continued with his attempts to implement the new process despite the fact that the Accounting Director believed that the control of travel funds should remain in his department. According to the test department travel clerks, a year after Friedman briefed Jensen, the Accounting Director's office was still not ready to support the new process.

When Friedman wrote his January post-trip report, he demonstrated his conviction that the new travel management process should eliminate jobs. Because Friedman had not received prior guidance addressing the issue of employment security, he believed that his remarks were justifiable given his process vision, which included eliminating travel clerks. When Friedman was admonished for his report, he became agitated and further convinced that the School was not committed to process innovation. General Engle, however, was committed to change, but he envisioned a future state that was differed from Friedman's process vision. While Friedman was primarily concerned with eliminating unnecessary labor, the General wanted job retraining to be a part of the change process. If Friedman had been aware of the General's plans, he would have likely worded his report differently.

Although the details of implementation can be worked out later in the project's life cycle, change strategist and implementers need to spread the description of the desired future state to the rest of the organization (Kanter et. al., 1992) Sharing the process

vision with the rest of the organization helps to ensure that change recipients understand why the change is taking place. If those affected by the change do not understand the goals of a change project, they are more likely to reach their own conclusions, confuse the pain of the change process with the desired end state, and not support the change process (Kanter et al., 1992).

Because the project did not have an agreed upon vision, it was impossible for the project's founders and the travel team to share a common vision with the rest of the organization prior to implementation efforts. If, for example, an instructor asked one of the project's founders what they wanted to accomplish, they would have heard a number of different answers:

- prove that JWTC is capable of reinventing itself
- save money
- eliminate unnecessary job positions
- remove unnecessary steps from the existing process
- make the travel management process better for the traveler

Although Friedman, Terry, and Lopez may have briefed instructors during their training sessions on one or all of these issues, not all of the test department instructors attended the training sessions. Because neither the project founders or implementers presented the instructors with a consistent reason for the new process, at least some instructors have reached their own conclusions. One instructor even suggested that new process was intended to make the work of the office staff easier. If this instructor truly believed that the new process was designed to improve the working conditions of office

staff, then as Kanter et al. suggest, he would have little reason to endure the pain of adapting to the new process.

B. THE ROLE OF THE EXECUTIVE STEERING COMMITTEE

1. The ESC's Role in Shaping the Process Vision

Tate and Terry wrote in their thesis that the School's ESC failed to provide a vision for the project. The project's founders were all committed to the success of the project, but they were unable to articulate a common process vision that had the backing of the School's most senior leadership. Friedman could have attempted to persuade others that his process vision was the desired end state, but as the circumstances surrounding his post-trip report indicate, Friedman's authority to shape the future would have been disputed.

According to Bushe and Shani, (1991, p. 126) it is particularly important in bureaucracies to have a process vision that is endorsed by an organization's leadership:

We can not overemphasize the importance of having a high level of commitment by the steering committee to the purpose for which the parallel learning [project team] structure is formed, if not the parallel learning structure itself.

If the ESC had disseminated and supported a consistent travel-reengineering process vision, they could have mitigated some of the difficulties experienced during the design and implementation stages of the project. In addition to ensuring that individuals affected by the change understood the desired goal of the project, a frequent reiteration of the desired end state by the ESC would have shown the travel team and the rest of the school that the ESC was committed to seeing the project result in a particular set of outcomes.

Because the Commanding Officer lead the ESC, the Accounting Director, travel team participants, and instructors would have viewed a process vision coming from the ESC as a statement of the General's desired end state. The project founders' individual process visions lacked such senior-level endorsement.

2. The Role of the ESC in Committing Sufficient Personnel Resources

Friedman frequently complained that he had not been given adequate personnel resources. He did not feel that the few hours a week that team members devoted to the project would allow the team to be productive. Friedman's views are valid and supported by Hammer and Champy's (1993) assertion that the minimum acceptable commitment from team members is 75 percent of their time.

However, a mandate from the ESC that team members dedicate more of their work week to the project would have given Friedman more than additional man-hours. Interviews with project team members and the team's minutes indicate that some team members were not personally committed to the project. For example, team members frequently failed to attend the team meetings and Friedman had to repeatedly ask team members for the same information. If the team members had spent a greater portion of their work week as team members and less time as workers within their functional departments, Friedman would have been more likely to have obtained the individual level of commitment that he felt was lacking.

In addition to some of the project's founders, team membership consisted of representatives from the Accounting Department and PSD and a travel clerk. These other individuals were functional experts in a particular area related to travel and spent an

average of 95 percent of their work week engaged in non-team related, functional work tasks. As a result, they viewed themselves as belonging to their functional departments, and this is one reason why Friedman did not get the individual team-member commitment that he had desired.

Bushe and Shani (1991, p. 131) explain why team members need to feel like they are members of the team instead of representatives from other parts of the organization:

While parallel group membership should be representative of the whole organization, it is important that members not be "official" representatives of any group. Being an official representative creates psychological pressure to represent the group's interests, which reduces individual initiative and makes it more difficult to take the organization's interests as a whole into account.

When Flood said to Friedman, "I understand where you are coming from, but I'm also taking direction from above," she showed how difficult it was to commit to the project and let go of her affiliation with the Accounting Department. Although Bridge's change model predicts that losing an old attachment will always be difficult, the team member's two-hours-per-week time commitment made the change process for some team members even more difficult.

C. RESISTANCE WITHIN THE TRAVEL REENGINEERING TEAM

1. Dealing with the Loss

In addition to old group affiliation, there are other factors that contributed to the team members' level of commitment and signs of resistance. Travel team members were more than change implementers; some were also change recipients. As change recipients, team members who were not the project's founders were involved in a project that would

change the way that they worked. Participation on the team involved letting go of old attitudes and beliefs, which is the first stage in Bridges three-step change model. For the team members from the Accounting Department, participation meant giving up the idea that only the Accounting Director's office should authorize the expenditure of travel funds. For the travel clerk team member, participation meant relinquishing the belief that it was the responsibility of a travel clerk to process travel requests. For the representatives from PSD, participation meant conceding that their office did not need to be involved in the process of paying travelers.

When people have to give up old behaviors and beliefs, they experience feelings of loss (Bridges, 1990). For example, Flood's participation on the travel reengineering team caused her a loss of turf, which Bridges describes as a loss of responsibility that is based on an individual's expertise. Flood's job in the Accounting Department included ensuring that the School's financial control mechanisms were used as part of the old travel management process. The new process, which she was expected to help design, proposed eliminating those controls and subsequently her need to apply her expertise in the new travel management process. As part of the new travel management process, academic departments, not Flood or her office, would be responsible for ensuring that travel dollars were obligated within legal and budgetary guidelines.

A common reaction to loss is a natural, self-protective attempt to maintain the old beliefs and attitudes that are being threatened (Bridges, 1990; Tannenbaum and Hanna, 1985). Prior to finalizing the ideal travel process flowchart, the project team entered into what Major Friedman described as an "extensive discussion on the controls that are

required or desired at JWTC.” During this discussion, Flood indicated that she wanted to hold on to those controls which were the responsibility of her office:

They were talking about bypassing, in a sense, the Accounting Director’s office, and I had to express my concerns about the fact that a lot of times we have departments out there that want to go ahead and spend travel money when they’ve never had the allocation for travel. So these were the things that [the Accounting Director’s office] were pretty concerned about, and the fact that right now as it is, having the travel orders come through our office, we really had to watch the departments to make sure that they did not overspend.

Flood reacted naturally to the proposed changes; she attempted to hold on to those activities that were facets of her job description.

2. Understanding the Old Process

Although additional information and persuasion do not eliminate the feelings of loss resulting from change (Bridges, 1990), dissatisfaction with the current process is a prerequisite to effective participation in process innovation teams (Davenport, 1993).

Beer (1988) agrees that dissatisfaction with the current process is necessary for change:

“Before change can take place key organizational members who are to adopt new attitudes and behavior must be dissatisfied with the status quo.” Therefore, the analysis of the current process was particularly important to the team’s success.

Although Elliot, Terry, Turner and Friedman were familiar with the problems within the old travel management process, other team members entered the project with an understanding of their functional areas, not an understanding of the current process in its totality. Consequently, the decision to dedicate two or three meetings to understanding the old process resulted in more than an inability to request waivers for required

procedures; it deprived Friedman of a potentially valuable way to motivate team members.

D. THE INSTRUCTORS

1. The Desire to Keep Travel Clerks

Instructors were also change recipients, but the project's impact on them is less clear. Some seemed willing to use the new process, but were dissatisfied with the software's user interface. Following our last interview with an instructor, Lopez had completed an users manual, which may make the new process more palatable for instructors.

The additional work created by the process partially explains the resistance expressed by some instructors. To fully embrace the new process, instructors and department directors would have to assume additional administrative responsibilities at the expense of what Alvarez viewed to be their primary responsibility, which was to provide students with an education. The natural response of instructors then was to try to hold on to the old way of doing business. Alvarez said he would be willing to use research funds to pay office staff to manage his travel. A similar desire to hold on to the old process has stalled implementation efforts within the Communications Systems department.

According to Bautista, the Communications Systems Department Director said to her, "You do it, don't give them [the instructors] the headache."

However, to describe the instructors reactions as emanating solely from a self-protective, albeit natural, attempt to maintain the status quo, ignores Travel Manager Plus's role in affecting the attitudes of instructors. For some instructors the software was difficult to use. The user interface was not intuitive; the program was slow; and the

software did not guide the user through the process of inputting the required data. The test department travel clerks, however, were more familiar with the software. Not only had some of them used the older financial version, which Terry described as being very similar to Travel Manager Plus, they also met weekly with the project coordinator to discuss how to properly use the software. Therefore, it is understandable why the intended end users wanted to retain the departmental travel clerks. Although Friedman wanted the new travel management process to eliminate jobs, the software that he and other project founders had selected had an opposite effect. It served to legitimize the travel clerks' position within the organization.

2. The Need to Involve Instructors in the Project

According to Whitaker and Elliot, instructors wanted a new travel management process. Unfortunately, as the instructors' reactions demonstrate, the end users wanted something different than what was implemented within the test departments. Alvarez's remarks support the notion that instructors disliked what they were given, not the concept of change: "The concept is good, but the execution sucks!"

Hammer and Champy state (1993, p. 130), "The best place for the reengineering team to begin to understand a process is on the customer end." Although not all process visions may have considered instructors to be the actual customer of the new process, several project founders wanted the new process to make travel management easier for the traveler. It is unfortunate then that the instructors did not play a larger role in shaping the final process. Even after the new travel management process was implemented within the test departments, the instructors' complaints were relegated to being signs of inflexibility

and egotism.

In addition to understanding what the instructors wanted, greater participation by the instructors would have increased their inclination to accept the new process (Bridges, 1990 and Kanter et. al., 1992). Because the travel reengineering project addressed issues other than customer satisfaction, it was important that the instructors understood the problems that the new process was supposed to rectify. Instructor representation on the travel reengineering team would have facilitated this understanding. According to Bridges (1991, p. 80), “ Selling the problem implicates everyone in the solution. It says, ‘If you want to be part of the solution, get involved. If you don’t, don’t complain.’”

E. FRIEDMAN, TERRY, AND TURNER

1. Dedicated Military Members or Simply Outsiders?

Friedman, Terry, and Turner were responsible for much of the progress of the project team, and Friedman believed that the enthusiasm shown by the three military team members showed that the “military is in more favor of this [the project] than the civilians.” A closer analysis of the facts surrounding the case, however, reveals that membership in the military had little to do with a particular person’s commitment to the project. Friedman even admits that “Elliot [a civilian] was good about volunteering his time too.” Colonel Kendall, on the other hand, initially resisted the scope and magnitude of the project.

Because the changes that they wanted did not force them to give up any important beliefs or behaviors, Friedman, Terry, and Turner could easily embrace the travel management project. The success of the AFDW project and their research into the waste

of the existing travel management process motivated Terry and Turner to attempt to build a better process. Friedman was motivated to change the existing process because his job as reinvention coordinator mandated that he reinvent something. His selection of travel management was based on two factors: an attempt to meet the requirements of his job by reinventing something that the General knew was flawed and others' previous research that showed that a better process could be developed. Friedman, Terry, and Turner were each eager to change a process that did not belong them.

Friedman, Terry, and Turner were outsiders. Hammer and Champy (1993, pp. 110-111) describe outsiders as individuals who "don't work in the process that's undergoing reengineering. . . ." and are "beholden to no one affected by the change" The advantage of using outsiders on a project team is that they help insiders, who are individuals who do have a vested interest in one part of the overall process, view the process from a new and exciting perspective (Hammer and Champy, 1993).

Outsiders and insiders needed to work together on the travel team. The insiders, who in this project were the travel clerks, Accounting Department staff, and representatives from PSD, are valuable because they impart their functional knowledge of the existing process to the rest of the team. Although insiders are important members of the project team, Hammer and Champy (1993, p. 110) warn,

Insiders by themselves, however, are incapable of reengineering a process. Their individual perspectives may be too narrow, confined to just one part of the process. Further, insiders can hold a vested in the existing process and the organization designed to support it. It would be asking too much to expect them, unaided, to overcome their cognitive and institutional biases and to envision radically new ways of working.

2. Implications

Nevertheless, the activities of the travel reengineering team show what can happen when outsiders dominate the change process. Not needing to go through a psychologically painful process of letting go of old beliefs and habits and eager to import AFDW's success, the outsiders wanted to hurry through the innovation process. They did not give other team members the opportunity to become dissatisfied with the old process; they did not consider alternatives to Travel Manager Plus; and ultimately Friedman became frustrated and convinced that others were not committed to changing the travel management process.

To blame Friedman, Terry, and Turner for problems that the project encountered would be just as pointless as blaming other team members or the instructors. The behavior exhibited by these outsiders was also natural and logical. They did not need to go through a lengthy change process similar to what is described in the three-step change models. Consequently, as change recipients were struggling to let go of old ways of doing business, Friedman was struggling to understand why others were resisting the changes that he, Terry, and Turner viewed as necessary.

F. CONCLUSION

It is impossible to say that one course of action would have improved the travel reinvention process at JWTC. There were a number of factors that contributed to the project's characteristics, and changing one factor alone may or may not have had a decisively positive impact.

Nonetheless, a common theme emerges from an analysis of the JWTC project: it is difficult at best for a group of outsiders who do not have the backing of senior management to attempt to import another organization's successes. The results of such a scenario include the following:

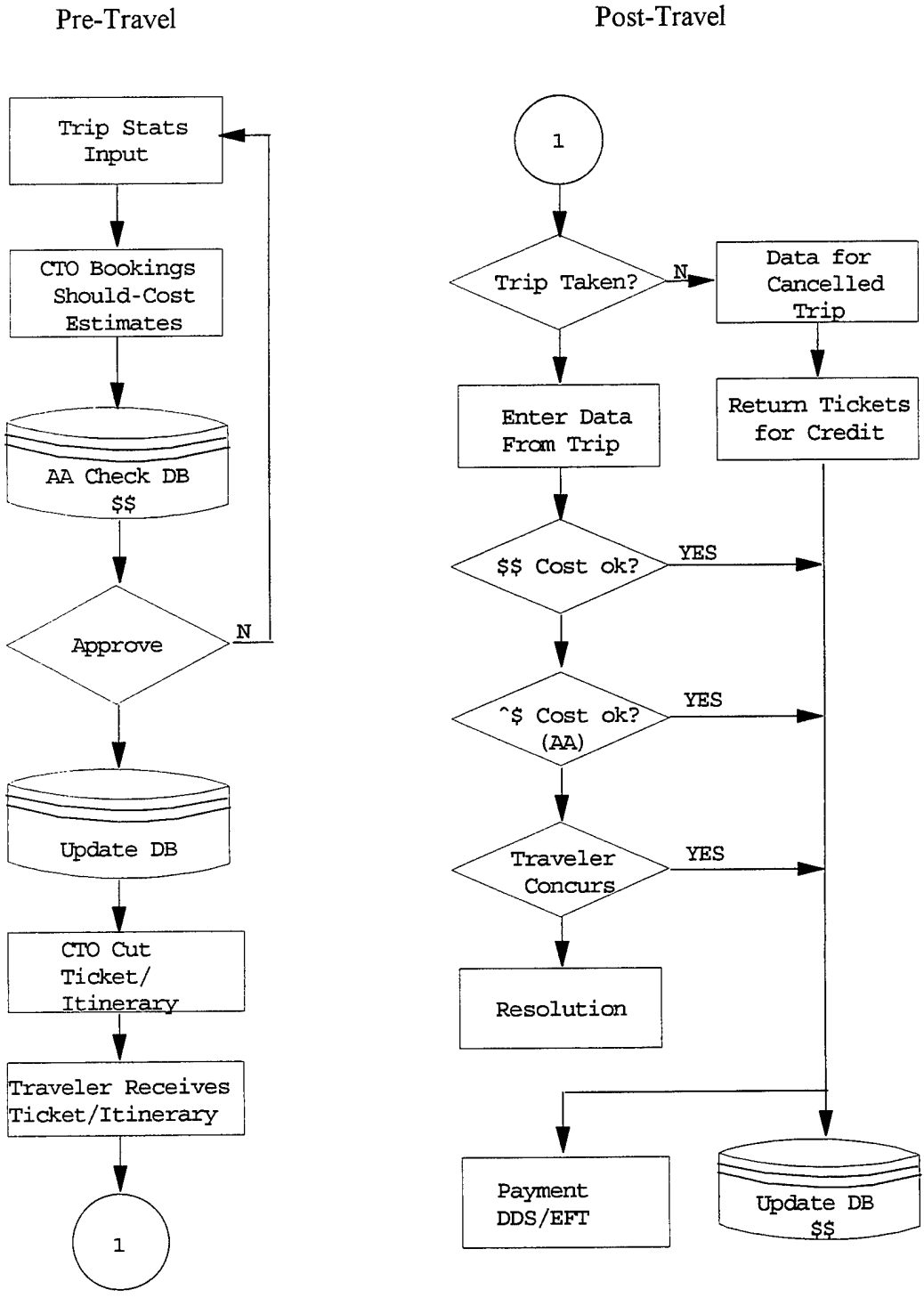
- confusion surrounding the innovation project's desired end-state
- a tendency of some team members to identify with their functional departments instead of what can be considered the outsiders' change project
- difficulty in appreciating the project's impact on the change recipients and the importance of the user interface
- a willingness by the outsiders to ignore potentially valuable change tools such as generating dissatisfaction with the old process and listening to the end user.

Innovation project participants who have no stake in the existing process can be invaluable in helping an organization change a particular process, but their existence alone does not guarantee success and can even contribute to the difficulty associated with the change process.

APPENDIX A. TRAVEL TEAM'S IDEAL PROCESS

The following is a description of the proposed travel processes outlined in the flowchart:

- ◆ *Trip Statistics Input.* Upon identifying a need to travel, the traveler will enter information about the trip into the software program. The information will include destination, itinerary, estimated expenses, etc.
- ◆ *Commercial Ticket Office (CTO) Books Reservation and provides should-cost estimate.* The initial trip information is electronically sent to the CTO. The CTO makes the reservations and provides the estimated costs of the airline, lodging and rental car. The software then generates a should-cost estimate based on the traveler and CTO input. The record is then sent electronically to the AA.
- ◆ *Trip Approval.* The AA will receive the trip record with a should-cost estimate. They will then review the balance of the identified travel fund code to determine if the money is available. If the money is available and the AA feels the trip is justified, then the record is approved. The accounting database is updated and the record is sent to the CTO to confirm reservations and purchase tickets. If the AA feels the trip is not justified or there is no money, the record will be returned to the traveler. The traveler must decide if the trip is essential to the mission and address the issue with the AA.
- ◆ *Database updated for travel request.* After the AA approves the trip, the database is automatically updated. This is accomplished by obligating the should-cost estimate of the trip against the fund code cited (plus any "safety factor").
- ◆ *CTO confirms reservations and purchases tickets.* The CTO receives the approved request and confirms all reservations and purchases the airline tickets using the travelers government charge card.



- ◆ *Traveler Picks up Tickets.* The traveler will be notified electronically that their request has been approved. The traveler can print a copy of the trip record if desired.
- ◆ *Was the trip taken?* If the trip was taken, the traveler will input the data from the trip. However, if the trip was not taken, the traveler will cancel the trip record and return the airline tickets for credit.
- ◆ *Database Update for canceled trip.* Upon canceling the trip, the database will automatically be updated to deobligate funds. This includes the money spent on the airline tickets.
- ◆ *Data from trip.* Upon returning from the trip, the traveler will input all expenses incurred. The program will then calculate the actual cost of the trip. If the actual cost is within the comptroller specified tolerance, the record automatically goes for payment and the database is updated with the fund cite expenditure. However, if the amount is outside the prescribed tolerance, the trip record goes to the AA.
- ◆ *Approving Authority for payment.* The AA reviews the reported expenses and can either approve or deny the excess costs. If the AA approves the excess costs the record is sent for payment and the database is updated. If the AA does not approve the extra expense, the trip record is returned to the traveler.
- ◆ *Traveler Review after the AA.* If the traveler agrees with modifications made by the AA, the record is approved, sent for payment, and the database updated. However, if the traveler and the AA cannot agree, the record will go to the comptroller's office for resolution.
- ◆ *Resolution.* The comptroller's office will review the record and make a determination based on the travel rules and regulations. After resolution, the record is sent for payment and the database is updated.
- ◆ *Database Update for payment.* Once the record is sent for payment the database will be updated to reflect that funds were expended. This process should eliminate unmatched vouchers.

- ♦ *Payment.* The voucher payment will be done electronically by GELCO government services. The EFT will be made directly into the traveler's bank account. The traveler will also have the option of sending part of his payment directly to the charge card company.

APPENDIX B. OLD TRAVEL FORMS

TRAVEL WORKSHEET

Please note that travel requests should be submitted at least 15 days prior to departure date; 20 days prior if you want an advance. Please submit department or direct funded travel with at least 3 weeks lead time for flag approval.

Name: _____ Ext _____ Date: _____

Dates of Travel: _____

Destination: _____

Type of Orders: Single Group Invitational (ITC) Fund Cite No Cost

!!! PLEASE DO NOT MAKE RESERVATIONS WITH INDIVIDUAL AIRLINES!!!

FILL OUT ATTACHED PRR FORM

PLEASE MAKE RESERVATION

RESERVATIONS ARE MADE

Airline _____
Rental Car _____

SATO _____
Rental Car _____

***Request authorization for use of TAXI/LIMO/POV in and around TOY area. No authorization needed for transportation to/from airport.

FUNDING: Cost Code/Job Order No. _____

REGISTRATION FEE REQUIRED? Yes/No \$ _____ (Refer to memo 9 Oct 85)

Date fee required by _____

1. Does registration fee include any
 - a) meals Yes/No b) lodging Yes/No
 If yes,
 - a. Dates _____
Meals _____
(e.g., Breakfast, lunch, or dinner)
 - b. Lodging: Fee/day _____ (list each day)

ADVANCE REQUIRED? YES/NO (ISSUED 2 days prior to departure date)

CONFERENCE ATTENDEES:

1. ARE YOU PRESENTING A PAPER? YES/NO
2. ARE YOU A PANELIST? YES/NO
3. EXPLANATION:

Utilization of government quarters required, if available, when traveling to another government post/installation, otherwise orders must be stamped to indicate nonavailability. Any special or unusual arrangements should be brought to the attention of the travel clerk BEFORE travel orders are processed. POC AT DESTINATION & PHONE NO.

TRAVEL REQUEST FORM

NAME: _____ SSN: _____
 DEPARTMENT: _____ CODE: _____
 DATES OF TRAVEL: _____ DATES OF LEAVE: _____
 ITINERARY: _____

PURPOSE: _____

*** IF NO COST TO GOVERNMENT:**

(A) WHO IS FUNDING TRAVEL?

PERSONAL FUNDS: _____
 PRIVATE COMPANY/UNIVERSITY(Name): _____

(B) HOW IS SALARY BEING PAID WHILE ON NO COST ORDERS?

O&MN: ___ AL: ___ LWOP: ___ OTHER (Explain) _____
 IF O&MN, JUSTIFICATION (Value to U.S. Government): _____

(C) WILL AN HONORARIUM BE RECEIVED? YES ___ NO ___

(D) NO. OF DAYS OF NO COST TAD WHILE IN A PAY STATUS: _____

SIGNATURES:

TRAVELER	(Date)	DEPT. HEAD / CURRIC. OFFCR	(Date)
CODE 08 (If Research \$3,000 or more)	(Date)	P.I. (If Research Funds)	(Date)
LINE MANAGER	(Date)		

ESTIMATED COSTS:

TRANSPORTATION Comm'l. Air (GTR)	PER DIEM**	REGISTRATION/ TUITION FEES	TOTAL
\$ _____	\$ _____	\$ _____	\$ _____

** Breakdown of Per Diem Costs:

Lodging & Meals: \$ _____
 Rental Car: \$ _____
 POV: \$ _____
 Taxi: \$ _____
 Rail: \$ _____
 Other (Specify): _____ \$ _____

SUPERINTENDENT APPROVAL (Required when (1) total estimated costs equal or exceed \$3,000; (2) total days of delay and leave equals or exceeds the total days of TAD; or (3) when civilian no cost orders exceed five (5) calendar days while in a pay status.)

Date: _____

 SUPERINTENDENT

IT IS THE RESPONSIBILITY OF THE DEPT. CHAIRMAN TO ENSURE THAT LABOR AND TRAVEL FUNDING ARE PAID FROM THE APPROPRIATE SOURCES.

NOTE: WHEN ON OFFICIAL TRAVEL, LABOR FUNDING WILL NORMALLY COME FROM THE SAME ACCOUNT AS TRAVEL FUNDING. EXCEPTION IS IF THE TRIP IS TO SUPPORT MULTIPLE FUNCTIONS OF THE SCHOOL. IN THAT CASE, IF THE TIME SPENT ON ONE OF THESE FUNCTIONS EXCEEDS 50% OF THE TRIP, THERE IS NO NEED FOR SPLIT ACCOUNTING FOR TRAVEL; I.E., THE PREPONDERANT FUNCTION CAN FULLY FUND THE TRAVEL. HOWEVER, LABOR MUST BE PRORATED FOR ACTUAL TIME SPENT ON EACH FUNCTION.

FUNDING ACCOUNT FOR LABOR

FUNDING ACCOUNT FOR TRAVEL

<u>Job Order</u>	<u>Hours</u>
DT _____	_____
DR _____	_____
IR _____	_____
RR _____	_____

<u>Job Order</u>
OPTAR _____
DR _____
IR _____
RR _____

(DT = Direct Teaching; DR = Direct Research; IR = Indirect Research; RR = Reimbursable Research)

* IF ALL OR ANY PORTION OF THE TRAVEL IS BEING FUNDED, OR PROVIDED IN KIND, BY OTHER THAN U.S. GOVERNMENT SOURCES, AND IF THE DOLLAR VALUE EXCEEDS \$250, COMPLETE FORM "GIFTS OF TRAVEL FROM NON-FEDERAL SOURCES" AND ATTACH TO ORDERS.

** IF TRAVEL COMMENCES ON A FRIDAY OR WEEKEND DAY, AND/OR RETURN IS ON MONDAY OR WEEKEND DAY, JUSTIFICATION FOR WEEKEND TRAVEL: _____

ACCOUNTING INFORMATION

AA _____
 AB _____
 AC _____
 AD _____

JUSTIFICATION IF SPLIT ACCOUNTING IS REQUIRED (If split accounting is used, labor must be charged proportionately): _____

REQUEST FOR TRAVEL

Name of Traveler (Last, First)	RANK/RATE	Activity attached to	Activity to be visited

RESERVATIONS BY: _____

OFFICE PHONE: _____

SSN OF TRAVELER: _____

YOUR FAX NUMBER: _____

EXACT LOCATION: _____

HOME TELEPHONE: _____

HOTEL RESERVATION ONLY: _____

BOQ REQUEST ONLY: _____

CC#: _____ EXP DATE: _____

NAME OF BASE TO BE VISITED: _____

RATE AUTHORIZED: _____

POC WHERE VISITING: _____

OFFICIAL PASSPORT NUMBER: _____

POC PHONE NUMBER: _____

ISSUE DATE: _____ EXP DATE: _____

RESERVATIONS REQUIRED

Departure Date	Approximate Departure Time	**Must Arrive By	From	To
Return Date				

**Latest time traveler can arrive at destination for TDY. This space may be left blank if exact arrival time is not important.

Seat Preference: Smoking Non-Smoking Window Aisle

Traveler Authorized Rental Car: Yes No Size of Car Authorized _____

Navy contract requires use of GSA Contract carriers in accordance with the Federal Travel Directory, Under the terms of the contract the government has guaranteed the airline named in the contract all Federal Travel between your origin and destination. You are advised that having the ticket reissued on another carrier for personal preference or convenience is prohibited. If it is necessary to change airlines as a result of flight cancellations or changes to travel requirements, a statement as to the reason should be included on the travel voucher.

Companies with which MTMC has negotiated special DOD/Government car rental rates will be used to the exclusion of all others. Navy contract requires use of the lowest available rate.

Note: Travelers are not required to select airline or flight number. Travel clerks are required to arrange least costly travel available.

PRIVACY ACT STATEMENT: The authority to request this information is contained in 5 USC 552 Department Regulations. This information will be used to assist officer and employees of the Department of the Navy in arranging passenger transportation. Completion of the form is mandatory except for SSN (SSN is mandatory for overseas travel and BOQ reservation). Failure to provide required information may result in delay in response or disapproval of your request.

Signature	Date
-----------	------

APPENDIX C. TRAVEL MANAGER SCREEN DISPLAYS

Travel Manager Plus [Icons]

VER 4.15 TRAVEL AUTHORIZATION - UNTITLED

File Edit Rates Tables Reports Setup Process Utilities Help

SOCIAL SEC NO
 646-46-4666 Dean, John .

CREATED [] SIGNATURE []

HORIZATION NO [] DATE 07/23/96
 TYPE SINGLE TRIP

TRAVEL PURPOSE
 SITE VISIT

[]

ITINERARY
 07/01/96 - 07/01/96

EXPENSES/ADVANCES
 28.58

ACCOUNTING CLASS
 Forwood1

OTHER COMMENTS

[]

Enter your signature code.
 Leave blank and press ENTER if none is necessary.

HP LaserJet 4 (Win) July 23, 1996 2:09PM Pg 1 Ln 1 Pos 1

Start WordPerfect - [Document] Find: Files named travel m. **Travel Manager Plus** 2:09 PM

Travel Manager Plus [min] [max] [close]

VER 4.15 TRAVEL AUTHORIZATION - UNTITLED

File Edit Rates Tables Reports Setup Process Utilities Help

SOCIAL SEC NO

DATE	DEPARTED/ARRIVED	LOCATIONS	LOCAL	DUTY	COST	DESCRIPTION
/ /	D				0.00	

Enter the date the trip will begin. (Format MM/DD/YY)

F1-HELP F2-MENU F3-ADD ITINERARY LINE F4-DELETE LINE F6-CHOICES ESC-EXIT

Setup The Microsoft Network

Start Travel Manager Plus 11:37 AM

Travel Manager Plus [Window Title]

VER 4.1S TRAVEL AUTHORIZATION - UNTITLED

File Edit Rates Tables Reports Setup Process Utilities Help

Common Carrier Reservation Request

Dep. Date:	07/01/96	Arr. Date:	07/01/96
Dep. Time:	0001	Arr. Time:	0000
Dep. Terminal:		Arr. Terminal:	
Round Trip:	yes	Reason Code:	
		Date To Be Ticketed:	/ /

COMMENTS:

Carrier: Flight: FF#:

Seat: Stops: 0 Meals: Equip:

Conf #: Res. Status: REQUEST

Enter the earliest departure date for this reservation.

ESC-EXIT

Insert HP LaserJet 4 (Win) Wed Jul 23 1996 1:42PM Pg 1 Ln 1 Pos 1

Start WordPerfect - [Document1] Find: Files named travel.m. **Travel Manager Plus** 1:42 PM

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