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BY

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A perfection of means and confusion of aims seems to be our main problem.

Albert Einstein

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Abstract

This study explores factors that can influence attempts by DOD organizations to change their internal processes or policies. When one considers how widespread attempts to change organizations are and the reported massive 70% failure rate (Kotter, 1995), the subject definitely deserves attention and research. Already a large number of studies with scholars from different specialties have been undertaken trying to understand the process. Yet, most of the empirical work is descriptive limiting our knowledge of the causal relationships that can make change efforts succeed or fail.

Due to its miserable implementation, the change process could have been abandoned as ineffective; but it is not up to individual employees to decide if it will take place. The transformation is being forced upon every organization in the market or in public sector environments, regardless of its origin, mission or any other factor. A combination of various (more or less) external changes literally brings organizations to their knees facing only two options: adaptation or extinction.

This is where uncovering ways to improve the effectiveness of change process will prove to be invaluable. Without this knowledge, there will be many companies that may fail. Among those at risk, there are many for which termination would be catastrophic. Organizations that play such a critical role where failure is not an option are primarily in the public sector, although recently federal government activities taking over major domestic automobile manufacturers such as General Motors suggest that private organizations may be too large to fail as well. Ensuring the existence of some organizations like the Department of Defense's is especially vital.

Unfortunately, most of the research targeting the subject of change has been carried out on private companies. This may be because they were the first to experience and endure it. It can also be because they are much easier to access for researchers than are public institutions. Military organizations, which comprise 3.5% to 7% of GDP (Chantrill, 2010) nearly 20% (Congressional Budget Office, 2008) of the funding for the federal government and account for 34.15% of all federal employees (United States Department of Labor, 2010) are among the least studied organizations. This research focuses on change efforts undertaken in organizations in the U.S. Department of Defense to address this gap in our knowledge.

Considering how critical the efficacy of Department of Defense is, there is no doubt that every effort should be taken to ensure that personnel in this sector are provided with solid knowledge of transformation in order to carry out the change process successfully. Organizational change and development and leadership literatures were the main sources of information about how to manage change efforts used for this research. Combined they supply us with a description of its nature and the ways to manage it.

The study design is a meta-analysis using existing research studies contained in the Center for Army Lessons Learned, an institutional repository for data from a variety of sources. This collection of information is gathered, analyzed, and disseminated in order to serve as a lesson learned for military commanders, staff, and students. The examination of change efforts undertaken within the past 30 years in the DOD conducted for this dissertation research is one of many examples demonstrating how the collected data is used. Information that formed the data set for this study was collected

from a sample of 75 of the 183 case studies available through this electronic repository. A grounded theory review of the cases was conducted in order to identify factors that influence change processes. The presence or absence of these was established using qualitative coding methodology. Through a combination of inductive and deductive testing, a better understanding of key variables (leadership, people) has been gained and a causal model suggested describing the relationships between key variables and the effectiveness of organizational change efforts.

The analysis presents four main research finding. First, I have identified common factors affecting change processes in DOD. These factors are quite similar to those reported in the empirical research on private and public organizations. This leads me to reject the hypothesis that the DOD is unique in their change efforts and that a generic theory of organizational change can be reasonably applied. Second, the role of the leader is quite important to DOD change efforts with evidence that a transformational leader is often the one in the position of leadership to manage a successful transformation of barriers into change enhancers. A third finding is that the even mix of barriers and enhancers or cases where there are more enhancers than barriers is more likely to allow change to continue and yield positive results. The opposite is true, if there are too many barriers, the change effort becomes stalled. Finally, while we cannot say with any certainty how barriers are transformed into enhancers, we can draw initial conclusions that this process will only occur when the barriers are explicitly identified and a problem set based on the situation is developed. The transformation can take many forms, similar to what could be expected from contingency and situational leadership theories.

With the foundation of these four findings, I build a model that includes the variables observed to be the most common in the DOD. The model explicitly identifies the interactive process between the environment and the factors and where successful, the enhancers to the change process that are fed back out into the environment. This model suggests a learning process that can be iterative but that also acknowledges the dynamic role of the environment as a potential barrier or a potential enhancer at different times or points in the change process. While the limitations of meta-analysis prevent me from definitively describing a regularly used DOD approach to handle barriers and how they are identified and transformed into enhancers, it is clear from the case coding that some type of turning point is in evidence when change is moved forward and tends towards the desired success. The majority of the factors do not differ from those identified in the academic literature; however, an argument is made that their application in the military setting is not unique. This conclusion is not sufficiently documented in existing empirical studies, and not currently described in the literature. The concept of managing them is not entirely new either, but seems to have been abandoned by practitioners and theorists in the search of innovative techniques.

The key contribution to the literature comes from discovering the factors' nature and from documenting the way they were managed by the DOD personnel. In spite of unique military environment, the method they commonly used can be successfully employed in every sector and company, and able to embrace a variety of possible factors that may emerge. Taking into consideration this flexibility of the identified technique, it should prove very valuable to people across various industries struggling with ubiquitous change and its challenges.

Chapter One: Research Study Introduction and Overview

On Monday morning, September 10, 2001 Secretary of Defense Donald Rumsfeld delivered a speech opening the Department of Defense (DOD) Acquisition and Logistics Excellence Week. In this oratory he officially named many of the system's features (overwhelming bureaucracy, lack of freedom to perform, inflexibility, existing in past era etc) as drawbacks that needed to be urgently reformed in order to ensure safety to the American people (Rumsfeld, 2001). He felt it necessary to explain why he was "violating" (as it was perceived) the established system: "Some might ask, how in the world could the Secretary of Defense attack the Pentagon in front of its people? To them I reply I have no desire to attack the Pentagon; I want to liberate it." (n. p.).

There is no way of knowing how successful he would be with his reform, although it can be easily assumed that he would have faced a lot of resistance. What is notable about this speech is the astonishing coincidence that he gave this "if it ain't broken, fix it" speech less than 24 hours before the unthinkable events of September 11th happened. As the days went by, it became painfully obvious how all the systems' weaknesses led to catastrophic misinterpretation, and inability to deal with a threat. The points Rumsfeld brought up in his speech were all of the sudden completely understood and logical. Moreover, people were absolutely stunned at how unaware uninformed? ignorant?) the staff and management of these systems have been, to let these flaws go unnoticed and erode into such a disastrous payback. The perceived grossly exaggerated Rumsfeld plan of the day before September 11th emerged as a "too little-too late" well intentioned wish list. Realizing the tremendous importance of the military's ability to

acknowledge weaknesses and immediately acting upon them came at a horrendous cost.

It took a long time for the top DOD leadership to recognize systemic flaws and decide that the entire organization needed to be transformed. Continuous improvement of seemingly minor things (that were probably perceived as natural) would probably result in smooth and mild ongoing transformation instead of now forced, major and drastic changes to every layer of this complex system. Staff and middle management, obligated by bureaucratic rules, did not have the luxury of adjusting the problems or even raising concerns, thus they preceded coping with them. The Pentagon machinery, together with many old-fashioned leaders, kept ignoring the growing gap between the environment and the operations of the DOD. It took a top politician, not worried about risking his position to challenge the stiff commanders and openly state the obvious, to bring the need for change to the surface and invite a critical re-examination of how the organization could offer what was needed and what could be gained through extensive change efforts.

A variety of factors may play a role in an organizational change depending on the situation, but it is usually up to the leader to initiate the change process and the ways it will be carried out. In fact, there is a large body of normative literature and empirical research that explores the factors that can influence change efforts. Many of these works identify factors that affect organizational change processes. While many factors have been well-established for private and public organizations (i.e. leadership style, structure, culture, etc), this study aims to examine specifically DOD organizations searching for patterns where the factors may be slightly different or entirely unknown to

academic literature due to the particular nature of work.

The factors most often mentioned by the literature as affecting change processes are communication, organizational culture and structure, team work (Organizational Behavior), people and leader (Leadership), work organization, economic reasons for change (Management, Business, and Economics). All these and many others surface very often during transitions, but one has a special feature: leader – put in charge to control and shape the rest of them. Hence, the role of leadership should be taken into special consideration while studying organizational change efforts.

Anecdotally, there are many reasons to suspect that change efforts in DOD organizations may be different from those in other types of organizations. One reason to expect a difference is that organizations in the DOD area have far less flexibility in performance and usually have more restricted access to funds than private companies have. That suggests that personnel in charge of change implementation will try to find effective solutions within strict regulations and budget. If one cannot rely on free thought and / or money then to what does one turn…? This is exactly the goal of this study – to detect what factors the military commanders lean on while transforming their units or brigades under so many restrictions.

A second source of differences in DOD organizations is that many times they operate within old and law-regulated structures, chains of command, specific ways of working, and tones of other procedures and policies. While many civilian leaders are free to adjust things like their communicating strategies, or reorganize what is not working, military commanders are heavily restricted on picking up an idea and applying

it to their units. If it is not along established procedures, then it will not be accepted. After all defense of the country is intended to be heavily controlled and not a subject to a trial and error form of management. Thus, academic theories are less helpful to junior and mid-management in DOD constrained within a command and control hierarchy where uniformity and compliance with order is valued. Even the top commanders are restricted unless given specific authority to change; and even these changes still have to be approved by politicians such as the chief executive and congress.

The leaders of DOD do not have a wide choice of incentives for rewarding and motivating (or punishing) the employees the way private sector leaders do. Monetary or fringe benefits are specified and not a subject of choice for DOD supervisors. Well then, without these resources how does one handle resistance to change or provide motivators to implement it? While civilian freedom of organizing is beyond limit, the military often does not have that same luxury. There have been gains in this area, however, officers are increasingly taught people-oriented approaches, which makes a tremendous difference in obtaining subordinates' cooperation and is suspected to be vital for successful change efforts.

The switch is recent, hence there are still many old-school top officers believing in "order" system and considering solely their own opinion – thus keeping new approaches from being considered and approved to use and remaining a major obstacle to transformation. DOD does not authorize leaders to fire insubordinate staff (which is a significant tool for effectiveness in civilian world). The potential for this to backfire can be high when considering "toxic leaders" (Hull, 1998) who akcnowledge only what is

orderdered upon them from above.

Quite often, DOD organizations, leaders, and workers are subject to political pressures instead of having the ability to rely on common sense reasoning. In many cases, changing political leaders, who either do not have enough insight and experience to understand DOD situation or have conflicting political agenda, significantly delay and harm ongoing transformation processes. As well, change may be different because of term and leadership changes. The chain of command from the very top to the operating levels of the organization can become severely twisted by law and politicians who make decisions, and then make military commanders responsible for implementing it (Scott, 2006). Having external decision makers who do not face the consequences and internal leaders bearing the burden of someone else's choices is difficult in any organization. Many valuable, experienced commanders retire at the point where they are unwilling to bear the responsibilities of ineffective national defense policies set by people outside of the organization. Those who stay usually pass the stress of implementing questionable decisions on to the lower echelons of the organization, spinning the vicious cycle of "order-done-no matter how odd" atmosphere and wasting time and resources on ill-suited proceedings.

If such decisions were regarding a color of furniture or lunchtime rules, it would not hurt anybody. But, if decisions are created in such manner regarding national security and its current transformation, it poses danger to all of us. Thus, the common forums for a federal employee are to be a whistle blower against the politician or to retire. Had the need for transformation been better understood a few decades ago,

national security agencies may have prevented a lot of tragedy.

An additional distinct feature of DOD organization is that the overwhelming majority of employees is exposed to danger and risk their health and life on an everyday basis. These employees already put a lot on the line. If transformation is not perceived as beneficial in at least some aspects, they have strong motivation to oppose it, especially when they technically cannot be fired for it. Again, the leader is often the one to do something about it. In DOD, it is not only about his/her skills, but also about how much power they have to put the transformation efforts on the correct track.

Based on these differences, it seems reasonable to expect that organizational change efforts in DOD organizations may be much more difficult to implement. That means the DOD leaders may have to come up with their own DOD-customized way of executing transformation. If this assumption is correct, then it is important to study change efforts in DOD organizations to make our knowledge more comprehensive and our theories more robust. To this end, this study seeks to answer four main research questions aiming at the DOD change.

Research Questions

Research Question #1: Are the factors commonly identified in the organizational change and leadership literature similar to those affecting organizational change in DOD?

Based on the similarity or dissimilarity of identified factors we will be able to assume the applicability of academic theories regarding transformation to the military

settings.

Research Question #2: What is the position of the leader factor in DOD transition?

In light of decisions and directives imposed upon DOD organizations by the external environment and political actors, combined with constraints on personnel management, the position of the leader factor in DOD needs to be more closely examined.

Research Question #3: Are there factors specific to DOD organizations that influence organization change efforts that are not identified in studies of "regular" public/private companies?

If there are unrecognized factors that make a difference while implementing transition in difficult DOD settings, their identification should bring considerable benefits to civilian reforms that occur in a less severe background.

Research Question # 4: What are the causal relationships between factors that influence DOD organization change efforts?

Elucidating how these factors separately, and in combination, influence organization change in this unique environment can help other "regular" companies as well. And, that was the whole purpose of this project.

Organization of the Dissertation

In Chapter Two, I review the literature on organizational change and development and leadership to establish the key factors that can influence organizational change efforts. Chapter Three provides a review of scholarly and professional literature describing change efforts in DOD organizations to set the stage for a comparison between generic theories of organization and knowledge related specifically to change efforts in military organizations. This is the gap in the literature that this study seeks to address. The research methodology is described in Chapter Four, followed by the analysis of the variables in the study in Chapter Five. In Chapter Six, the results from the quantitative and qualitative analysis through three different stages are presented and the findings from this analysis are discussed. The research questions are answered in Chapter Seven and these results are compared to existing literature. The dissertation ends with some reflective thoughts on the study's purpose and how the results can inform the scholarly literature as well as practitioners in the military as well as other sectors. Avenues for future research are also described.

Chapter Two: Literature Review

The subject of change has been studied widely by scholars from variety of fields. Scholars in the disciplines of psychiatry, psychology, and anthropology were among the first to study the topic of change. Later, researchers in sociology and economics began to explore the topics. The most disciplines to join this research endeavor are from the disciplines of organizational behavior, business, and leadership. From this record, one can conclude that change is examined at many different levels, i.e., individual, organizational, and systemic institutions. In fact, there is a criticism (Poole and Van de Ven, 2004) that the research regarding change is daunting, and runs in all kinds of directions without a unifying framework.

Experts on organizational behavior, management and leadership heavily emphasize the role of the leader in the change process. The leader should be the one to recognize the need for transition, envision the outcome of it, settle on the ways it will be implemented and most of all communicate it to the employees to get their buy-in and cooperation. Change, even though is very often forced on the organization, will very seldom implement itself as a consequence of that external force. Thus, the leader is the one to recognize it and set its tone, direction, and means. The outcome very often depends on the chosen ways of implementation, making the leader's perception, abilities and choices critical to the overall process. Therefore, this chapter will review literature regarding organizational change and leadership. The organizational change part of the review will try to capture change types, triggers, barriers, factors leading to change and those promoting its effectiveness. The section focusing on the topic of leadership will briefly picture some of the leadership theories and ways in which they

can be complimentary or detrimental to transition process.

Review of organizational change literature

Burke in his book on organizational change provides a few definitions regarding transformational processes (2002 p.64-67). Gersick (1991) defines change as "A network of fundamental interdependent "choices" of the basic configuration into which a system's units are organized, and the activities that maintain both this configuration and the system's resource exchange within the environment. Deep structure in human systems in largely implicit." In simpler terms, he goes on to say: "incremental changes in system's parts will not alter the whole." Tushman and Romanelli (1985 as cited in Burke, 2002 p. 65) state that organizational change occurs when "…organizations do not evolve but are more likely to change via strategic reorientations that demand significantly different patterns of operations."

It also occurs when "… an organization evolves through various life cycles" (McNamara, 2010, n.p.); or, the simplest definition is perhaps: "Organizational change occurs when a company makes a transition from its current state to some desired future state" (USLegal, 2010).

Generic organizational change definitions state that it is a transition from one state or strategy to another. In however many different words used by the authors, it appears they are basically the same. Definitions do start differing when applied to different sectors or disciplines. For example, an economic definition of change: "The response of firms and the industry to changed market conditions, economic growth and competition through innovation" (Nelson and Winter, 1982, p.3).

A group dynamics definition of change: “Change is an alteration in the nature of group interaction or performance, in the state of the group as a whole, or a second order change in the patterning of group processes. Shifting levels of dynamic variables over time serve as indicators of change processes” (Poole, and Hollingshead, 2005, p.324).

And, a military specific definition of change: “Revolution in the military affairs is a radical change in the conduct and character of war” (Gray, 2006).

Differences based on the disciplinary background of the scholar, (i.e., response of companies to the market, patterns in teams and group processes or the new conduct of war) suggest there would be different sets of factors that these change processes will have to address. There are different economic, human and different objectives to achieve. Following this argument, there will be differences in type of change (cost cutting, cultural) and the choice of methods of change implementation (work re-organization, new communication channels and forms of interaction).

Burke (2002, p.82) emphasized one more principal difference, the one between revolutionary and evolutionary change that applies to every one of the above-mentioned types of transformation: “Revolutionary change occurs in leaps, spurts and disruptions, not in an incremental linear fashion.”

Evolutionary change is typically attempting to improve aspects of the organization that will lead to higher performance. The fundamental nature or deep structure of the organization remains undisturbed. The primary rationale for its strategy to implement the organizational mission remains intact. Yet major organizational change can occur such as modification of the structure, installing a new system of

information technology or launching a new line of business. As such, change can be perceived as being common, especially in the private market.

Whatever the reason and means of execution, the goal is the same – changing the existing state a company is in. The variations of organizational change definitions cover a very wide range of different processes leading to the same goal: a new state. Understanding this should help leaders make an informed decision while managing transformation (which failure to do so is so common today).For the purpose of this study, we adopt a definition of organizational change as: "A difference in form, quality or state over time in an organization" (Poole and Van de Ven, 2004, p.xi).

Seo, Putnam and Bartunek (2004) document the history of how scholars in many disciplines developed an understanding of organizational change organizing our knowledge into three main patterns: 1) human capital development, 2) internal process change caused by external environment imperatives, and 3) learning and transformational organizations. Each pattern is described more fully below.

The first clearly emerging pattern related to organizational change was the need to consider the role of the human system and how it would respond to change efforts. In addition, there was a developing sense that there was a need to preserve the human capital of the organization. The theoretical roots of this pattern emerged in the 1950's. The base for considering organizational change processes consisted of Lewin's, Likert's and Hackman and Oldman's theories. Lewin (1951) introduced a three-step model of change (unfreeze-change-refreeze) and force field analysis (organization as the equilibrium of driving and opposing forces). Combined these two theories were

considered to be the foundation of the transformational perception.

In 1967, Likert's book, *The Human Organization*, was considered to have introduced a path-breaking theory of management systems and styles reflected the core belief of how the human capital should be managed. The theory strongly stressed trust in participative system as the optimal condition, where mutual respect, teamwork and cooperation are the standards for managing employees. The natural extension of this idea was present in Hackman and Oldman's theory (1975) of individual focus and job enrichment as necessary in order to ensure internal work motivation, growth satisfaction and general job satisfaction. Thus, human systems and the value of human capital to the organization was focused on heavily.

Turning to the second pattern of organizational change theory, early scholars perceived organizational change as a mainly internal process. The primary purpose of change was to achieve a selected goal, usually fixing a problem or developing the organization to avoid problems in the future. In the view of these scholars, organizational members were the change agents, and they were supposed to go through the process utilizing participation and collaboration. Many times, the scope of change concentrated on individuals and groups and how they responded to the changes being made to internal processes. Generally, scholars were concerned that the transition processes were episodic and implemented slowly, albeit thoroughly.

When the change started, it occurred at a surprising rate and forced transformation upon the organizations, it was reflected in the literature as early as the late 1960. Scholars' perception on the subject of change and the degree to which this

was viewed as an internal process changed as well over time. The main reaction was to drop traditional thinking and "unlearn the old habits!" (Poole and Van de Ven, 2004, ch.4). Thus, a new philosophy, represented by theorists such as Katz and Kahn (1966), Lawrence and Lorsch (1969), Nadler and Tushman (1977), and Tushman and Romanelli (1985), emerged in the organizational change literature.

Katz and Kahn's introduction in 1966 of open systems theory with the exchange and alignment with the environment theory is believed to be the base of organizational existence. It was complemented by Lawrence and Lorsh's (1969) contingency approach stating that work and organizational structures depend on the characteristics of the environment. Following the idea, Nadler and Tushman (1977) declared that there should be a fit between the strategy, organization and the environment. Surprisingly though, the common belief of punctuated equilibrium (periods featuring a "normal" way of working and periods of revolutionary change) was still considered true, as it sometimes is today (Tushman and Romanelli, 1985). It was also pointed out that change depends on leadership and that it often requires new vision. During this time, the value of human systems faded shifting the advantage to economic, technical and strategic systems.

Overall, change was viewed as caused by the need of obtaining a purpose – adaptation to the environment. Usually initiated and even forced by external factors, it required much wider range; now it was system wide and at a large scale. The traditional change agents, organizational members, now sought help of the other agents: outside consultants. Participation with the lower level employees was replaced with more

directive leading. The change speed was rapid, but still transitions were only episodic.

The next observable shift in organizational change understanding was visible after 1990. At this time, Senge's (1990) theory of learning organizations gave a foundation for new thought. Thus, now the change is viewed as occurring constantly and joined by continuous learning and enhancing the capacity to create. Scholars of this period try to combine the best of both past approaches. They definitely do not discard the past, but are aware that traditional ways may not always be effective. They put much more emphasis on human than economic or technical systems. People and their ability to learn and create are being considered directly affecting the organizational capacity to learn and create. The purpose of the transition is still development and alignment with the environment. The primary change agents are organizational members. The focus of change focus may be both external and/or internal: it depends on the situation. Change may be slow or rapid, group or system wide oriented, and so on; but contrary to the past, scholars in this phase agreed that it is continuous.

Over the period of these fifty years of organizational change research, we have had three main patterns of how organizational change is viewed: human systems development, internal process change reflecting external influences, and the transformation of learning organizations.

One thing that the historical patterns have in common is that they each identify factors thought to have significant influence on the relative success of any change efforts. Throughout the years, many ideas and theories about factors influencing change have been accumulated and make a rich picture of possible types of change, its barriers,

enhancers and methods of handling. Each of these is explored in more depth below.

Types of change

Many types of change are mentioned in the literature. Poole and Van de Ven (2004) see it as critical to distinguish between processes and people's role in the change since it influences the types of changes, which are very different in the nature: planned and unplanned ones. Planned change is consciously designed and brought upon an organization. The focus of the theories relating to planned change is how to implement it successfully and ensure its effectiveness. Unplanned change is usually forced upon an organization by some factors and quite difficult to control and bend to the company's advantage. Theories regarding unplanned change focus typically on the factors that force the changes. (Seo, Putnam, and Bartunek, 2004).

Luecke (2003) offers a different perspective on the primary types of change, identifying four main types: structural, cost-cutting, process, and culture.

Structural change –includes reconfiguration and reorganization of the units, parts and departments of the organization. It may emerge in form of acquisitions (within and outside of the company), mergers, diversification, specialization etc. This type of change is the closest one to Hammer and Champy's idea of reengineering (1993) as a way to alter organizational structure and achieve more efficiency.

Cost cutting change – one of the most popular types of change and usually the first one to be tried. It focuses mainly on eliminating non-essential activities, expensive extras, switching to the ways to produce at a lower cost.

Process change – the center of attention here is restructuring the existing methods of work in order to deliver results faster, of better quality and/or of lesser cost.

Cultural change – oriented at the change of the cultural values and the overall work climate of the organization. Naturally, it may involve a change of a small subset of values, or entirely new culture may be introduced.

There are also differences in the focus of change leading to different types of change seen on the market. The focus of change depends on what is described by Beer, Einstat and Spector (1990, as mentioned in Yukl, 2005), on what needs to be changed. The authors concluded that in order to implement change one needs to know what to change. They also state that it can be either the change of attitudes or roles, but not both. The fact that the opinion/perception of what needs to be changed is a key factor, is very valuable and worth noting. From the time the change process starts, and depending on the final decision, the focus of the change is formed.

Another way to examine change is to focus on whether it has an internal or external focus. The internal focus is the most common, virtually ubiquitous. One can guesstimate that 99.9 percent of ever existing organizations have been concentrating their efforts on improving and adjusting their internal structures to the external environment. Within an internal change perspective, we can name countless change efforts related to product, people and organizational structure. Product-related changes include merchandise improvement, production processes, work organization. People-oriented changes consist of human resources policies and practices, reward and motivational systems, work practices etc. Organizational structure-related changes

contain organizational systems of authority, departmentalization, organizational culture, communication networks.

The external change focus seems to be quite rare. Usually it is possible for very strong and financially sound companies with plenty of resources and knowledgeable workforce in research and development department. Sometimes a marketing unit takes on such a challenge and indeed can be successful. There were times when small companies grew into powerful monopolies and oligopolies (two major monopolies in the market such as Coca-Cola and Pepsi-Cola) and decided to shape - and in the case of the oligopolies cooperated to do so – the external environment according to their desires. And, there are times when small, mid-size or even big corporations accidentally discover this something that overnight shakes and changes market reality.

Harvard professors Beer and Nohria (2003 as described in Luecke, 2003) offer another set of change focuses: “E” and “O”. Theory “E” refers to economic approach to change and reflects the goal of dramatic increase of shareholder value, followed by equally dramatic actions taken by the top management, i.e. abandoning contracts between the employees and the organization, workforce reduction, sales of assets, bonuses for performance etc. This type of change usually improves short-term cash flow and share price, but causes a lot of stress for the employees, chaos, fear and quite often loss of those who are not willing to deal with such working conditions. Those who stay very often will lose trust in the company, lose the commitment and motivation, and are not as loyal as they were before.

Theory “O” stands for organizational capabilities approach, where the overall goal is to develop an organizational culture supporting constant learning and a high performance. It requires good relationships between the company and the people, employees’ commitment and participation. The people are valued and seen as the most important assets and can feel it in the way the organization treats them. Thus, the actions taken are quite different from those in theory “E”: people are given greater autonomy, are urged to active participation.

Which type of change is the most effective? It depends on many factors. All possible changes have long-lasting consequences that should be carefully considered. Quite often, it is not even a subject of choice for a company. Many corporations prefer using a mix of the two approaches. One may conclude that also customizing an approach to the existing situation would be beneficial for organizations.

In this section, we presented a few examples of how scholars view change and its types. There may be a planned change or usually unwanted and difficult unplanned one, economic change bringing short-term, radical results or organizational one focusing on people as the most valuable assets. There is a popular internal change in the form of adapting organization to its surroundings or external one, where a corporation tries to shape its environment. And, there is even more detailed explanation of changes which can be cost, structure, process or culture oriented. Each of the proposed sets reveals its own distinctions and possible consequences, which add to our understanding of change. Next, we turn to events that cause the changes.

Factors Leading to Change

Relatively few scholars write about why the organizations change in the first place, but there are at least two comprehensive summaries that I describe here. Poole and Marshal (2004) state that scholars have recognized four motors of change: evolution, development/purpose, confrontation/conflict, and competition for resources. Evolution causes changes due to the course of time, natural changes in the company in its life cycle. Development or any other wanted purpose by the owner /management of the corporation brings planned changes. Confrontation and conflict between departments, which were supposed to cooperate with each other, leads to ineffective work organization, conflicting goals of the sub-units force the firms to reorganize its processes. And finally competition for the resources, whether between the business competitors or within the company brings small or big revolution upon organizations.

A second summary of forces for change is presented by Robbins (2005) who describes six major reasons for organizational transition. The first one is the nature of the workforce. Almost every organization in America has to adjust to multicultural employees. Being able to embrace and take advantage of the different values of the employees is a challenge. Human resources policies and practices require constant alteration in order to attract, recruit and keep the diverse workforce. The same issues regard the “star-performers employees” that, unlike the old generations, are not necessarily loyal to the corporation, and can easily find another job with a different company. Many organizations strive to keep up with diverse, sometimes inadequate work skills of the employees. It is especially difficult today, when the turbulent business

environment requires broad and highly specialized knowledge at the same time, and constantly updated on top of that. The most important though, is that the organization should be "built" the way that it will be able to take advantage of the diverse background, knowledge and skills this multicultural workforce brings.

Technology is a second reason for change. The speed of technological changes is overwhelming and many companies struggle just to keep up with it. Technology has the power to change the jobs and the entire organizations. It affects communication systems and can bring a considerable advantage with it. Technology influences the speed and flow of information – usually significantly increases the flow of the information which requires the corporation to change and work faster. Following the above factors, technology may affect the entire communication network, usually for the better, but a company must be able to use this positive change efficiently. At times, technology brings a heavy burden on entire industries, as the music, film and book/publishing companies have experienced, they have suffered tremendous losses due to the easiness of copying.

Economic shocks are another reason for change. Historically, the past has been a reliable predictor of the future. This was due, in large part, to the fact that the environment was steady and chaos was not threatening organizational existence. Nowadays organizations have to be able to absorb whatever life throws at them and effectively cope with it, or better yet – take advantage of it. Virtually out of nowhere increasing or plummeting prices can and do force changes on the companies. The collapse of huge businesses like Enron has sent many people and organizations home

with nothing (lost jobs, retirements, investments; lost businesses for clients, suppliers and stakeholders). It also slammed us with a hard-learned lesson about ethics, transparency, responsibility and easiness of manipulation of someone else's money. There are also good sides of economic unforeseen changes as well. Instead of recession following the 9/11 attacks, the house prices kept rising, keeping many organizations alive and some even thriving.

Competition is the fourth reason on the Robbins's list. The nature of competition has changed and keeps changing for today businesses. An organization's leaders cannot necessarily know all their competitors who may come and go unexpectedly. They exist all over the world and may come up with the ideas you simply would not even think about, or never paid attention to. If an organization remains passive and relies on submissive responding to the competitors it is very likely to fade away for the clients and eventually vanish from the market. Successful organizations have to be proactive, they have to be able to rely on short product cycles, have to be highly innovative and flexible. The most successful ones are those who can dictate the standards and conditions for the competitors and have other companies following them.

Social trends are a fifth possible source behind change. The way of meeting, talking and working has changed impressively within the last two decades. Now, a considerable number of people work from home, other countries and continents, from planes and trains. Diverse values of different cultural backgrounds have been pooled together; they mix, match or cause explosions. They make us discover new ways for life, work and success. Today organizations cannot rely, like they did in the past, on the

loyalty of the greatly missed generation of Veterans (Robbins, 2005, p.20). Nowadays workers will often change employers or career paths altogether, whereas Veterans would remain loyal to the company throughout their careers.

The sixth source of change is world politics, as cited by Robbins. Even though this is cited as the last factor, it is obviously not the least powerful. The fall of communism, and disintegration of Soviet Union, suddenly opened arms of China, happenings in Middle East and the rise of Muslim fundamentalism affects organizational positions today. World politics, alongside social trends, influence businesses heavily. Technology also has had its influence, but not as constant as it does today. Together with economic shocks, they made their occurrences periodically in the past. Competition – sometimes was virtually non-existent, sometimes was highly cooperative, and today is very fierce.

In addition to the factors described in Robbins's book, improving the overall efficiency of the organization is a motive to change. That may have various reasons mentioned above, but quite often is an effect of difficulties in getting people to cooperate and perform and /or result of ineffective organizational structure (communication channels, work design, chain of command etc). This happens to also be mentioned by Yukl (2005, p.288). Usually, efficiency declines due to the environment changes, but less often, organizations have been unproductive from the beginning. Thus, organizations can change because of their desire to enhance their performance, innovation, creativity, or their aspiration to shape organizational future.

The leader can also be a significant reason for change. It maybe this kind of force, which – in form of the leader – pushes and motivates the company for change. Or it may be that a company, tired of ineffective or tyrant leader's practices, removes him/her and changes in the preferred direction.

Another, almost universal reason for a change for companies is the adaptation to the external environment. This one quite often takes a form of passive adjustment. However, I always respected companies who were implementing changes due to the feedback from customers, suppliers, stakeholders, and employees (Wal-Mart, Bank of America, Starbucks, some of the "green companies" responding to ecology and energy-saving problems in the ways that help their profits and benefit the clientele). One can cite the example of green companies who are responding to social pressures while still finding ways to be profitable. Even though it may look like a more reactive than proactive change, people greatly appreciated it, especially on the outside of the company, and reflect organizational flexibility and willingness to change.

A much better, but more uncommon reason for change is a desire to shape the external environment, and to dictate the standards and market conditions for the rest of the companies. This is the focus of the new Prometheus process that proposes ways to analyze, "attack" and change your surroundings to your company's advantage (Warden and Russell, 2006). It is a daring idea, but the goal can be obtained, as some corporations have proven (e.g. Microsoft).

Combining all of the above-mentioned aspects, one can state that the factors leading to change come either from the inside of the company or from its surroundings.

The internal factors include organizational evolution, a desired purpose, the nature of work, internal conflicts, top management and a need to adapt to the environment or aspiration to change it. The external reasons consist of almighty politics, economy, technology, social trends and the everlasting competition. These reasons become a choice or a force for companies to start change process. The change process is cited as one of the most challenging tasks the top management faces today (Yukl, 2005; Higgs, 2006). Below are described the most often mentioned problems encountered during transition processes.

Barriers for change

Identifying barriers to organizational change is particularly important. There are no barrier free-transitions and being aware of what may cause the problems will let us prepare ahead – giving a chance to minimize the source of potential barriers. If practitioners had a good knowledge of possible barriers they could encounter, they would try to eliminate these beforehand and then proceed with smoother and therefore much shorter, less costly, and less traumatic transformation. Even upon encountering unexpected barriers, they would have much better idea of how to handle them. This would save a lot of trouble in today's market place and turbulent environment.

The literature identifies common barriers to change processes, including the leader, vision, structure, culture, communication and a planned process for change. Factors such as these are described across a variety of literatures including organizational behavior, leadership and organizational change. Below is a brief summary of each of them.

Let us start with the leader and his/her style. Whether it reflects his/her traits, behavior or skills, a leader style may be either a great help or a serious problem in implementing change (Burns, 2003). The now famous Ohio State and Michigan studies (Yukl, 2005; Robbins, 2005) indicate that leaders who organize structure and are people oriented / or just people oriented, do obtain better work performance and higher employees' job satisfaction, thus, better chances for change implementation. Jansen (2000, p.53) calls for paying attention to "considering the role change agents play in fostering the very resistance they are trying to overcome".

Vision is one of the factors very often emphasized by leadership scholars as an essential part of leading (Conger and Kanungo, 1998, Burns, 1978). Thus, lack of vision is a significant problem. How can one lead, control, manage change if there is no point to refer to, if people have no idea of where the corporation is headed? This issue is also brought up in terms of ways of communicating vision (Kotter, 2007) or the more often – "under communicating" it. Relationship with employees is frequently addressed in regards to the leader (Burns, 2003; Smith, 2006; Hoag, Ritschard, and Cooper, 2002; Kouzes and Posner, 1995) but organizational culture has also power to shape relationship between employees. Leaders need to make sure that culture will consistently be reinforcing mutual trust, respect, support and collaboration instead of fierce individual competitiveness. Kouzes and Posner (1995), Burns (1978), Bass (1985) and Goleman (1995) provide valuable description of how to build better relationship with your followers, which will more than likely translate into better performance. Yukl (2005) reminds us of participative leadership that may take a variety of forms (Heller and Yukl, 1969; Strauss, 1977; Likert, 1967; Tannenbaum & Schmidt

1958; Vroom & Yetton, 1973) and empowering people. It is also worth emphasizing the conclusion that Jones, Jimmieson, and Griffiths (2005) came to: failure of planned organizational change may be due to many factors, but "few are as critical as employees' attitudes to change event" (p.362).

Resistance is one of the major obstacles on the path to change (Yukl, 2005; Robbins, 2005; French and Coch, 1948; Kotter 2007; Huczynski and Buchanan, 2003). It has its source in people's life and work habits, in the fear of change, of the unknown. If a leader does not effectively communicate with followers and explain why the change is needed, what is likely to happen when we change and if we will not change, and if the employees' fears will not be addressed, one can be sure that a change effort will fail.

Resistance can also have its roots in the structure of the organization (Robbins, 2005; Kotter 2007; Fayol, 1916). Many times a leader forgets that employees' sincere efforts can be diminished if there are old, rigid systems that will thwart whatever attempt is tried to be carried out. Changing the structure from the old to the new effective one, which will be supporting or even buffering modification efforts, usually is a major challenge in the change process.

Similarly, the organizational culture may be resisting change (Senge, 1990; Prahalad & Hamel 1994; Burns & Stalker, 1961; Smith, 2006; Kotter, 2007). The existing culture may not be change oriented, it may have deeply rooted traditional ways of working, may promote criticism of the new, may be opposed to risky operations. If such an atmosphere has existed for years in the company, it becomes just another problem to deal with. Organizational culture is very difficult to change, as it is shaped

over the long years, and is intensely embedded in organizational history, habits, ways of working, employees and their attitudes. Many authors (Wright and Thompsen, 1997; Kotter, 2007; Robbins, 2005; Natemeyer and McMahon, 2001) stress the need for open, flexible, learning, pro-innovative, and people oriented organizational culture. With such a climate, it is much easier to support the change.

Communication and communication networks may also cause obstacles on the path of change process (O'Hair, 2006; Robbins, 2005; Kotter 2007; Smith, 2006). How people communicate, how quickly the information flows, who does it reach, who blocks it, who forms clicks, and who is an outlier away from the information has a major impact of efficiency of everyday work, let alone the change efforts. Communication scholars work on the subject of how to evaluate, change and shape the network in order to make it effective and compatible with organization needs. There is also an old, good media richness theory addressing the choice of the proper medium used to ensure the message will get to the followers and will be understood.

Finally, the presence or absence of a planned process for the change may be a source of difficulty. While existence of a strategy is definitely a plus, a quality of it may either help or destroy the change implementation. If the plan is not realistic, not built on consistently updated information and agreed on with the followers, there are good chances that it will destroy undertaken efforts.

It seems important to emphasize again the cost of the misconception on the subject of change. As Beer et al. (1990) suggest - the focus of change depends on what needs to be changed. The authors conclude that in order to implement change one needs

to know what to change. Thus, the perception of what needs to be changed is crucial for transitional success. The inaccuracy of the subject of change more often than not is a major obstacle to the whole process of transition. For example, if a company needs to reorganize its work processes, but instead thinks that changing cost structure will help, then the existing problem will not get solved.

The above description of barriers is certainly not an exhaustive one, but captures what is the most often identified as the obstacles for change. Just from this report one can see that the difficulties can be encountered everywhere: starting from the idea of change and its plan, through existing organizational structure and culture, the leaders, their relationship with employees and employees themselves. Many of these problems are overlapping and trigger other trouble; consequently, the change implementation is a very challenging task. To balance the subject, we may need to look at the more positive side of the transition project.

Factors promoting change effectiveness

When it comes to factors that lead to change effectiveness, one should consider how change effectiveness is measured. Little empirical research exists on this subject. But reviewing how organizations perceive change success, one may conclude that change effectiveness is usually judged by two facts: obtaining assigned change goals and financial performance (costs, profits, cash flow).

Many scholars (for example Robbins, 2005; Yukl, 2005; Beer et al.,1990; Kotter, 2010; Lewin, 1951; Schein, 1992; Duck 1993) suggest aspects that usually positively influence change. These are described next. One factor serving the change

efforts from the very beginning is the willingness to change. This willingness can be observed by examining many of the factors that were described above as barriers. Some of the reasons for change are positive, particularly when they are internally driven change efforts and not externally forced.

Other factors can be either positive or negative, depending on the situation. For example, just as the leader can be a barrier, they might also be a change enhancer. When there is an open-minded leader (instead of a blind one surrounded with "yes-people"), who is aware of the need to change that is a great starting point.

The people in the organization are another factor that can represent a barrier or an enhancer to change efforts. Now, the willingness to change has to exist also in the top, mid- and lower management and the rest of the employees. A leader who is aware of the need to change would communicate it to the followers and make them aware of this necessity. More, the leader would implement a system reinforcing change-oriented behavior (Yukl, 2005; Kotter, 2007; Ramayah et al 2007; Robbins 2005; Natemeyer and McMahon, 2001). This condition is not always needed, as sometimes the willingness to change already exists.

Another commonly agreed upon factor that can influence, positively or negatively, change efforts is the vision and its proper communication (Weber, 1922; House, 2006; Burns, 1978; Bass, 1985; Kotter, 2007). The knowledge of where do you want the organization to be, how to get there, is a vital factor. Without a vision, one cannot lead a change. The proper communication of the vision is also emphasized not only by leadership, but also by organizational behavior and communications scholars

(Robbins, 2005; Baker, 2002; Robertson, 1998; Young and Post, 1993).

Related to the presence of the vision is the role of strategic thinking and a good plan for fostering successful change efforts (Yukl, 2005, Robbins, 2005; Kotter, 2007). As noted above, not having a planned process for change can be a barrier. However, being prepared and know what needs to be changed (Beer, Einstat and Spector 1990), what we will start with and how we will carry it all out can be important enhancers leading to a successful change effort.

From this discussion, we can conclude that we need people involvement in order to implement our change (Yukl, 2005; Bass, 1985; Burns, 1978; Kouzes & Posner, 1995; House, 1977). A leader alone can hardly ever carry out a successful change. Subsequently most scholars suggest for a leader to be at least moderately people oriented, respect the followers and cooperate in them, so they will not work against the leader's efforts. Furthermore, we can consider the power bases of a leader (French and Raven, 1959). The leaders who have referent and expert power bases will usually have a better relationship with the followers, and therefore more likely obtain better performance, than those who rely solely on coercive or legitimate power.

A proper employee motivation system should be in place for successful change implementation (Robbins, 2005; Kerr, 1975; Burns, 1978; Bass, 1985; Locke et al., 1981; Herzberg, 1967). Every organization has some sort of a motivation system in place, but it is especially useful in times of change. Change is a stressful and difficult time for the entire organization, it is easy for people to get tired, become indifferent or just quit. A motivation system can and does play important role in keeping people

going. To keep them going in the right direction, one needs to make sure that the system reinforces change-oriented behaviors that are consistent with what the organization needs (Kerr, 1975).

Teams and team building are also considered very helpful at work (Yukl, 2005; Robbins, 2005) and in change efforts as well. Organizations benefit from their collective effort, better quality decisions and solutions, often from their diverse backgrounds (Gabert, 2006; Franklin, 2006). Obviously, there are disadvantages, but in majority of the cases, they are outweighed by the advantages of team work.

Cross-functional efforts could also help the change efforts. A cross-functional effort is naturally more effective than a single department's attempts to carry out a major plan influencing entire organization (Yukl, 2005). Today, very few changes involve only a single sub-unit of a company. Instead, the entire organization needs to act as one, all the departments need to support and fully cooperate with each other, especially when implementing a change process.

The list of factors helping transition efforts is not any shorter than that of the obstacles. We can consolidate all the aspects into a short list: leadership (visibility, support and alignment of leader's message and behavior); people (majority of the factors are linked to people: willingness to change, team building, cross-functional effort, proper motivation pointing out how much successful change depends on human beings); significance of vision and its communication; alignment of organizational culture and structure with change processes and the new vision. The ideal condition would be to coordinate all the factors into a successful transition process. However, in

practice, doing this can be an ordeal. This is where the challenge for the leaders is encountered.

Theories on the Role of the Leader in Change Processes

The role of the leader in the change process is quite significant. Even if the leaders do not support the change, the people can push it through, but they usually do it with a help of an informal leader that emerges from among them (i.e. Lech Walesa 1980-1990 and Pope John Paul II 1978-1990 during the fall of communism). Hence, formal or not – leaders seem always have a place in the transitional efforts). However, as many scholars indicate, change efforts are mostly unsuccessful (Martin, Jones, and Callan, 2006; Higgs, 2006; Applebaum and Wohl, 2000) and the most of all, it is because of management failure (Burns, 2003). Leadership literature review can be of big help here, as it portrays successful and unsuccessful leadership models.

Leadership theories describe many of various types of leader's behaviors and styles, which may be detrimental or beneficial to executing transition process. Overall, we may divide leadership theories on task-oriented, people –oriented and mixed. As the research shows (Ohio State and Michigan studies described in Yukl, 2005 and Robbins, 2005) leaders who are people- oriented do obtain better performance and help creating better work conditions (climate, trust), which in turns helps motivating people.

One of the latest theories that describe a leader just about perfectly for organizational changes is transformational leadership. Created by Downton (1973) and popularized by Burns (1978), this theory describes a leader who is truly involved in the hard work, highly respects the followers and cooperates with them while working

towards common goal. The transformational leader's role is to transform organizations and/or people – formed "by nature" to support change processes. Next to these people-oriented tactics, we see a heavy emphasis put on ethics, creating and maintaining the "right" work conditions, recognizing need for change and consistently working toward achieving a vision.

In more recently works, popularized by Daniel Goleman (1995), we have the introduction of an emotional intelligence theory (Thorndike, 1936; Wechsler, 1939; Gardner, 1983; Salovey and Meyer, 1990), which mainly promotes self-awareness and is based on better self-management, as well as understanding of others and thus building successful relationships with people. Even though the theory is not aimed at change process specifically, one can assume that a leader, who can build a good relationship with and between the followers, will face fewer challenges during the transition process.

It is difficult to pinpoint who formed a theory of visionary leadership; nevertheless, visionary leadership is in fact very helpful during the change execution. Scholars describe it as the core components of effective (Brockbank, 2006) and excellent leadership (Campbell and Samiec, 2006). However, common sense suggests that it is much easier to lead through difficult times when we know where we are going. After all, the leader should know where one wants to get the organization to go, what to achieve etc. without a vision, it would be just drifting, most probably far from any success. This theory alone may not be enough to manage the transformation process, as a leader has to be able to have employees believe in the vision and motivate people to work towards it. However, I still see it as an essential part of any and every style chosen

by a leader. It is quite impossible to be a transformational, effective or any other kind of leader, if you do not know what it is that your organization should be working on.

Charismatic leadership (Weber, 1922; House, 1977; Conger and Kanungo, 1998) may be helpful in leading change, but one has to have this charisma first. Thus, this theory may not be applicable to all leaders. Charismatic leaders are less likely to have problems convincing their followers about what should be done and how. However, since it is based on personality traits, one cannot just easily pick and use this approach. I also believe that a charismatic leader may fail leading through change, if one does not have a clear vision/goal and idea how to achieve it, or of the change goal does not appeal to everyone. The mission may not be accomplished as well, if a charismatic leader looses the respect and loyalty of the followers.

House's (as presented in Robbins, 2005) path-goal theory describes a leader that seems suitable for managing change. Such a leader assists followers by helping them obtain their goals, by removing barriers, providing support and direction, and by clarifying the path when confronted with obstacles. This theory seems to be similar to transformational leadership, considering that leader motivates people, helps them with obtaining the goals, provides support etc. On top of that, a leader is supposed to be flexible and adjust his actions depending on the employees and environment. However nice and reasonable this theory seems to be, amazingly it received only partial support from other studies and is also perceived as a complex one (Northouse, 2003).

According to today's thinking, is it assumed that autocratic leadership would not be in support of transition efforts, due to not being open for other people's ideas,

participative leadership and definite lack of having good relationship with employees and other stakeholders. All the usual characteristics of autocratic leadership are not thought to be helpful to implementation of change process.

Transactional leaders seem to be not suitable either, as they usually do not pay attention to people, work atmosphere, and they rely solely on a simple reward-punishment system, that does not appeal to all employees, and is not supportive of long-term commitment. This theory was long practiced and successful in the past, when people had different values and the workplace rules were unlike today. In the second half of the 20th century, it lost its significance, but it is still being tried by some leaders, usually with very short-lived effects.

The impact of Greenleaf's servant leadership on change is hard to assess. In his 1970 article "The Servant as Leader" one can find that:

> **"***The servant-leader* is *servant first… It begins with the natural feeling that one wants to serve, to serve* first*. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is* leader *first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions…The leader-first and the servant-first are two extreme types"*. (Greenleaf, no page available)

One may wonder if a servant leader is strong enough to lead a change. There seem to be very little, if any research done on the effectiveness of servant leadership, thus we may only discuss the issue. The idea is very close to transformational leadership, but there are some differences; i.e. servant leader is focusing on people and

their needs, whereas transformational leader focuses on change and its execution, while maintaining good, ethical atmosphere at work. Servant leadership worked for the author of this theory and is heavily popularized by servant leadership centers, but it is difficult to find any empirical research results supporting this type of leading.

Situational leadership (Hersey and Blanchard, 1977) presumes that a single best leading style does not really exist, since it really depends on the situation what would be considered the best in particular settings. The scholars propose that leaders adjust their style based on what is relevant in a given situation (task type, urgency etc), and followers' maturity (their skills, ability and willingness to follow, experience and need for supervision). Situational leadership seems to be very unique; first of all it is based on the premise that there is no single best style to lead, secondly it has capacity to embrace many other leading styles and explain why they do or do not work in certain situation (autocratic style in spite of its negativity has its place and time).

Many leadership styles may support successfully leading organizations through change. Based on the research we may imply that any people-oriented leader will be valuable, as good relationships with subordinates' usually equal better performance. Thus if a leader has a vision, a good plan how to reach it and emotional intelligence, it should prevent many serious obstacles to transition even before they occur, hence making the change process that much easier.

Summary

The most condensed description of organizational change could be that it is a very complex process, appearing in various forms, and forced upon almost every

organization in the 20th and 21st centuries. Some of those transitions were a matter of choice, but most were a result of heavy environmental pressures. We have seen changes that are revolutionary or sequential, economical or organizational, structural or cultural, with an internal or external focus, and many others. These changes often reflect a reason and objective of the process.

While a type of change may be of managerial choice, the factors leading to it are often beyond the manager's influence. The economic shocks, competition and politics tend to be huge energizers to change. Technology brings often welcomed, although quite costly, changes. The multinational workforce has transformed organizational cultures and HR practices. Social trends dictate the path for the companies to follow, although some companies try to dictate what the social trends will be. Most of those factors are of external nature. It appears that the number one internal factor is the leader, with the power of making or breaking the company one leads. Depending on a leader's style, intentions, skills, and ambitions s/he is intentional or unintentional source of change. The other internal change factors of people, organization, culture and structure become such often because of the decisions that leaders made (someone shaped the organizational structure and culture; someone exceeded the budget or implemented an innovative idea, someone under-communicated the objectives etc).

Quite interestingly, the very factors leading to change can play a role as barriers or enhancers during transitional efforts. Politics play a negative or positive role in many organizational changes. The same is true for the overall health of economy, credit, technology or lack of access to it. Scholars have already written numerous books describing the dual role that the leader and people have in change processes. Debates on

this subject can go forever.

Bottom line, putting together a list of barriers and enhancers experienced in the DOD organizations' change efforts is the goal of this research. Such a list should be of great use to the military officers, and to civilian practitioners as well, who by nature of the "regular" market usually enduring a bit less of the problems their DOD peers do, but still can benefit from the enhancers the military staff put to use.

Chapter Three: The Unique Case of DOD Organizations

The literature regarding public organizations and above-mentioned factors is very rich, however there is not too much written solely about the Department of Defense. In the introduction to this study, I presented an argument suggesting that a special treatment of these kinds of organizations would be worthwhile to broaden our understanding of the degree to which generic theories of organization can be successfully applied to military organizations.

"Revolution in the military affairs is a radical change in the conduct and character of war" (Gray, 2006, p.vi) and as such seems to be very dissimilar from what organizational change scholars usually focus on. "Regular" public and private organizations have a lot more to choose from when searching for the best possible solutions, the situations and factors described in the literature are very similar to those they deal with. DOD, as a "national security establishment, is not simply an organization: It is a system of interrelated organizations that presumably share a common purpose. It is also a vital institution that both reflects and shapes the dominant values of American Society" (Foster, as cited in Runzi, 2007, p.12). Another point is that the "…national security establishment must be capable of reconfiguring itself, not simply to adapt to its internal and external surroundings, but to influence the direction and shape of those surroundings" (Foster, as cited in Runzi, 2007, p.12). This way it stays as a major power, not relying on others, and not fearing foreign forces. That aspect is also very unique to DOD: it can not outsource its services, or drop them once they become too costly.

DOD's rare specialization of war is fused with the seemingly contrary mission of ensuring peace. Either one of these assignments still poses significant danger to the members. DOD employees are at considerable risk and stress, facing life-threatening tasks daily. There is even a notion that employees belong to the military. Employee's private decisions have to go along military plans; some even require supervisor's approval. They are constantly moved all over the world. When they deploy, they are gone for months and even years. How does one lead and motivate under such conditions?

Alberts and Hayes (as cited in Scott, 2006, p.11) stated: "…warfare is qualitatively different from the management of other human enterprises …" and that is easy to agree with. Many CEO's smoothly float from one company to another, but it is very likely they would not have been in an easy position if put in charge of the country's defense. The military is certainly somewhat unique in its monopoly of violence (Scott, 2006, p.11) and peacekeeping.

Given that DOD keeps its people in constant change, it should be natural for them to go through transformation. It turns out it is not. The attacks and aftermath of 9/11 caused quite a bit of turmoil in the DOD, with which they are still struggling. There are few non-military journals or journal articles describing organizational change in the DOD. The primary military-oriented source is the *Quadrennial Review Journal*, which contains articles regarding many subjects and organizational change in the DOD is just one of these subjects. Military students researching organizational change turn frequently to the academic literatures for theories, models and methods.

Out of the problems that surface in both the military and civilian world, there is a changing pace and even mission (National Guard); limited budget issues, limited power of the leader and political pressures.

The increased reliance on the National Guard as a combat force, regional peacekeeping force and a homeland defense/security force has stressed the National Guard beyond programmed requirements. Competing missions (federal and state) and structure requirements (war fighting vs. domestic support/homeland security) are at odds in the time of war. It is possible that there is an overload to the system, but units must meet both, the state obligations and the joint war fighting and stability operations (Sellars, 2006, abstract). And for some branches it has been going on for quite some time: "Beginning with Operation DESERT STORM and continuing with many other operations throughout the 1990s, the Air Force found itself deploying forces more frequently. At the same time, the reliance on the reserve component began to steadily increase, as the total size of the active force was reduced by 40 percent. As a result, the percentage of active duty airmen that were designated as deployable grew from 12 percent of the force in 1990 to 76 percent in 2000" (Warren, 2005, p.4).

Despite the war demands, the government may not be assigning enough resources (money, staff, and equipment) to the DOD to carry out the two missions: war and transformation. The old schedule still applies to the Reserves – active brigades get everything first with the best equipment, all the leftovers in terms of money and equipment are for the reserve (Fuhr, 2006, p.3). The same is true for the educational system that has not significantly changed since the Cold War. There is money either for education or for training, but not for both. "This system was one of the contributing

factors to the unavailability of several Army National Guard brigades in the Gulf One; many officers and non-commissioned officers were not qualified…" to be put in charge (Fuhr, 2006, p.4)

Due to the end of Cold War "funding dipped to its lowest in 1995…accounts were often funded at 50 percent or less in 1990's" (Johnson, 2006, p.8) which had an influence on number of essential personnel when the Global War on Terrorism started "…funding and programs were having a direct impact on increased retention of field grade officers and senior noncommissioned officers. It also indicated that readiness was suffering" (Johnson, 2006, p.9). A few years into the war, senior mission commanders still face the difficult decision on whether to fund housing maintenance or unit training (Johnson, 2006, p.11).

Astonishing, although not uncommon, is that "some of the attention – in terms of money and equipment - is political rather than objective assessments" (Fuhr, 2006, p.4). The DOD personnel, however, were not passive, though, they were trying to drive the United States Government (USG) into a new way of thinking (Torres, 2007 p.1) Most common in the public organization is the problem of a limited power that leaders have in a form of lack of controlling authority leading to inability to execute operations (Todd, 2006).

Overall, DOD organizations, just as all public ones, have less flexibility, restricted access to funds, and are heavily regulated. These conditions suggest that they can benefit from the literature focusing on public sector. However, its unique mission and work (war fighting) makes it sometimes impossible to adapt literature prescriptions

and advice. In this respect, the Defense Department is isolated and left to rely solely on their staff's experience and expertise.

Summary

Overall, due to intense change in the DOD (stress of physical, fiscal and human resources) and their significant struggle with the process, any research, literature tailored specifically to the military needs would be of a great help for this unique and very important department. Moreover, if there are factors in the DOD transition processes, that are different from those identified by the academic literature, it would be useful for all to recognize, name and research their role.

Chapter Four: Research Design

Scholars have dedicated great energy to determining what factors influence the relative success of organization change efforts. In the literature on organization change, theorists point to several benefits that are expected from change efforts and recommendations on how to make change efforts the most successful. However, almost an equal amount of space is devoted to a discussion of the resistance to change and the factors that lead to this resistance. The leader's role in organizational change efforts is another topic that has been widely studied with prescriptions about the optimal type of leadership abounding. Much of the literature takes a generic approach to the study of change efforts, arguing that there are more similarities than differences and that the sector of the organization, while interesting, is not a factor significantly influencing change effort success. Few studies, however, directly address the applicability of generic theories of organization change to military organizations.

Chapter Three builds an argument that these types of organizations are worthy of targeted analysis to verify the claim that prescriptions for successful change efforts can be generically applied to all organizations. This area of inquiry provides a unique opportunity to deductively test existing theories. In this research design, it is expected that there will be areas where existing theories fall short when applied to the DOD organizations. Thus, the research design also contains a significant inductive research component, where generalizations gathered from empirical observations will be used to propose new theoretical developments.

This study is a qualitative meta-analysis of existing data, reanalyzing case studies prepared by other authors to document the presence or absence and relative strength of the eight variables identified in the literature review as being critical to the overall success or failure of organization change efforts. As part of this meta-analysis, the research also seeks to uncover other variables referenced in the cases that have significant influence on an organization's change efforts.

According to Guzzo, Jackson, and Katzell "meta-analysis is a literature-review technique with great face validity. Prior to its appearance, literature reviews were restricted to narrative accounts or accounts that made use of minimal levels of quantification. Through its quantification, meta-analysis is a significant alternative to these traditional methods." (2009, n. p.). Having very few rules, this technique leaves the researchers with many choices and decisions i.e., what studies to examine, how to determine findings, whether or not to correct errors in the sample studies, etc. The most significant advantages of this technique come from providing us with a possibility of examining a number (small or very large number) of research studies and drawing conclusions from all of them, giving an excellent base for generalization of the findings. It allows detecting patterns across many studies. The prime challenge is not so much to clearly define the goal of the study but developing the suitable and correct coding scheme that will allow for answering the hypotheses.

Qualitative methods of studying a subject allow for examining data in a way that quantitative methods could not reflect such as determining social settings, background, and many other variables in which context is more important than its numerical form.

As such, meta-analysis, grounded theory review, and content analysis provide a good method of examining a large number of case studies, yielding an overall picture of factors significant for organizational change in the Department of Defense.

Using this overall research strategy (a meta-analysis drawing primarily from qualitative analysis of existing case studies), the first research question is directed toward deductive verification of factors thought to influence change efforts commonly cited in the organizational change and leadership literatures. Research question two explores in depth the influence of the leader on change efforts, since the type of leader and their communication of the need for change and vision of the organization after the change efforts is extensively documented in leadership theories. Research question three is devoted to the inductive exploration of existing data to uncover factors that should also be considered in the organization change literature. Finally, the fourth research question reflects a desire to describe a causal model for DOD organizations based on the findings of this exploratory research. The model that results from this data analysis will be compared to other models that exist in the literature to identify differences and gaps and offer explanations for why this might exist.

Research Question #1: Are the factors commonly identified in the organization change and leadership literature as important in influencing organizational change similar as those affecting DOD transformation?

Research Question #2: What is the position of the leader factor in DOD transition?

Research Question #3: Are there factors specific to DOD organizations that influence organization change efforts that are not identified in studies of "regular" public/private companies?

Research Question #4: What are the causal relationships between factors that influence DOD organization change efforts?

The first step in the research was deductive verification of the importance of factors already identified as influencing organizational change efforts. Rather than starting with a blank sheet of paper and inductively identifying variables in a case-by-case analysis, a handful of pre-identified factors were singled out from the body of academic literature. These variables are frequently named as significant elements of change processes in studies in organizational behavior, leadership, business and economics. Described below are the eight factors that are deductively examined in this research based on the literature. The first seven factors serve as the independent variables for the research and the last factor is the dependent variable; that is all of the first seven factors are expected to have a significant influence on the conclusion that a change effort was a success or a failure.

Pre-indentified variables:

The definitions below served as a base for identifying and coding the variables. To code the cases, I looked at sentences and paragraphs, searching of the use of the specific term or for language that would fit within the pre-established definition.

Reasons for Change: reason/s why the transformation process is being undertaken. Any time a reason for change is pointed out/emerges as a factor, it will be coded and counted as such.

Leadership: very broadly taken, since I was not exactly sure what I would find. Thus, the leadership variable will be looked at in terms of:

-type of leading (authoritative, people or results oriented, transformational, transactional etc);

-leader's personality influencing the processes in the organization;

-leader's decisions, actions – whether or not it was leader's or other factors' influence that shaped the change process**;**

Any time a leader's influence on the change is brought up /emerges, it will be coded as such.

People: literature names the people as the most valuable asset of the organizations. They have enough power to either help the company succeed or bring it to failure. Consequently, this is the way we will be taking people in consideration: whenever employees (non-leaders) are the ones to influence organizational change in any way, it will be counted as a significant factor.

Communication: communication networks and its habits influence the overall outcome of work. Communication factor will be looked at from its patterns perspective here. If it will contribute to the organizational change in any way, it will be counted as a

factor.

Organizational structure: organizational structure is named as an important factor in organizational behavior and economics literature. It can contribute to efficiently carried out projects or impose significant costs to a company. Whenever organizational structure would influence change efforts it will be considered as a factor.

Organizational culture: understood as the "personality of the organization" (http://managementhelp.org/org_thry/culture/culture.htm); reflecting its values, standards, habits. It usually embraces a certain way of working, imposes particular behavior patterns. Whenever its pressure weighs on the ongoing transformation efforts it will be counted as a factor.

A planned process for change: the planning process and its results in terms of appropriate or inadequate transition process. If a part of planning course is named as having impact on the overall change and its consequences, it will be counted as a factor.

Outcome measures of change efforts: the ways the case study authors evaluated the change outcomes will be looked at in order to become familiar with the DOD transformation, its definition of success/failure, and its methods of estimating the effects.

There are commonly named factors in organizational change such as teamwork, diversity and conflict management. It seems the uses of these terms are often derived from the above "parent" categories and are simply more specific operationalizations. Since the purpose of this research is to start with a general set of variables and let the

data speak of what other more or less specific ones are important in DOD, I do not include the similar terms identified in the literature as separate variables, but code them in the equivalent "parent" category.

Data Source

To test these variables and examine the causal relationships, I used data drawn from an existing repository of case studies and reports related to the Department of Defense organizations and housed in the Army Center for Lessons Learned. The Center for Lessons Learned collects reports, thesis, descriptions and studies in various forms regarding a range of subjects. Cases reflecting organizational change in the DOD are one of many themes. Included in this repository are nearly 300 cases reported from all branches of DOD as well as cases from other federal organizations.

There is wide variation in the types of cases housed at this location with descriptions of many different settings and proceedings of organizational change. These cases take the form of professional reports, descriptions, and masters' degree theses collected by the DOD in their Center for Army Lessons Learned. This center is available for anyone to access, however its main users are military leaders, enlisted personnel and politicians who try to take advantage of the very lesson learned.

Specific to this study, the population frame from which I sampled was all the cases in the DOD Center for Lesson Learned that described organizational change in the DOD within the time period of 1980 to 2010. In this population of cases, there are few that reported change efforts earlier than the 1980s. I decided not to include these earlier cases because they would not reflect the efforts to transform the military based on a new

war-fighting context and strategy. Initially I searched for cases that had organization change in the title, the abstract or the table of contents. Over 200 cases were discovered through this first round of filtering the cases. From this list, I browsed through the introduction of the document, selecting cases that had the organizational change effort as the focus of the research and publication. Using this criterion, there were a total of 183 cases that were acceptable for inclusion in my study and this was determined to be the population of cases for the meta-analysis.

Once I had established the boundaries of the population identified for this study, the next step in the research process was to determine the sampling strategy and sample size. Overall, a total of 76 cases were chosen for this study representing 42% of all cases in the population being studied. The sampling strategy was to randomly draw 76 cases. To do this, I randomly picked up one case at a time from the list of all studies. The case was deleted from the sample (and moved to the list of already examined cases). The process of blindly choosing from the cases available on the sample list was consistently carried out through the process.

What were the authors of my sample cases writing about in their case studies? I report on this question to assure the reader that the case studies could provide materials appropriate for secondary analysis to draw meta-analytic conclusions about change efforts in DOD organizations. Nearly 70% of the cases in the sample were descriptive of the change efforts undertaken in their organization. The remaining thirty percent of the cases reported on a specific research project undertaken as a requirement for completion of a program of graduate study.

Within this sample, there is nice variation in the authors' affiliations with branches in the military, in terms of the education achievement of the authors and the purpose of the research project. Descriptive information is provided in Table 1 and a narrative of the representativeness of this sample follows.

Table 1: Affiliation of Case Authors

	Overall	PHD authors	War College Graduates	Master's Degrees thesis	Other
ARMY	38%	0%	18%	18%	1%
CIVILIAN	24%	8%			22%
NAVY	16%	1%	8%	7%	
AIR FORCE	14%	1%	8%		
MARINES	5%		3%	3%	
COAST GUARD	1%	1%			
	99%	12%	37%	28%	24%

When looking at the stratification of the sample, we find that 38% of the cases come from the Army. The random choice of the cases from the population resulted in a sample of cases that accurately reflect the DOD structure (Army providing the most cases, Marines, Coast Guard the least), which is one of the best basis to consider the findings of this study valid and general for the Department of Defense.

Within the sample of cases, the majority of the authors were seeking advanced degrees from elite institutions. This distribution of authors is important because the case studies were guided by theoretical as well as substantive literature and the research was designed according to the best practices in social science research. In fact, it was not unusual to find hypotheses formally stated and variables and causal relationships tested using sophisticated statistical analysis. In this sample of 76 cases, 12% of the authors had achieved a PhD, and 37% were graduating from the War College. This is important

since the War College is attended by selected senior officers who have already received Master's degrees. Officers selected for the War College are the top officers, with a high potential of reaching the rank of General or a rank appropriate to their branch of the military. Fifteen percent of the cases studied were authored by individuals completing a masters' degree. Of the remaining eleven percent of cases, the authors held prestigious positions in government service including a General working with civilians on a Scientific Board, reports written for Congress, and research project/reports from non-military universities or organizations.

In conclusion, the sample is judged to be an appropriate as it is representative of the population of DOD organizations and since the data comes from all the DOD branches. Nearly one-half of all cases come from authors with a very high level of education (masters level or higher), allowing assuming that the reports were of very high quality. The theses and the reports were assumed to have been held to high standards.

Weaknesses of the study

Weaknesses of the study can be addressed by considering different types of validity commonly described by methodology scholars. The first type of validity to consider is internal validity, commonly referred to as a test of the credibility of the results of reviews. There are several different types of internal validity to assess. Each is defined below and then a determination is made concerning the degree to which it can influence the research results based on the design of my study.

Face or measurement validity asks: “did I measure what I claimed to measure?” The measurement criteria were based on the academic literature, thus following already established variables. Looking for new factors, I started from looking at the already known and established new ones, so the face validity is high in terms of adopting the “natives” language and perspectives.

A second type of internal validity examines the reliability and consistency of the coding system. The original variables in the coding system were based on existing literature and I used the definitions and examples provided in the literature to guide the coding of the cases. As new factors emerged, the author wrote down what the variable seemed to be about in her coding scheme and then went back and examined the previously coded cases for the presence of the new factors.

When considering statistical conclusion validity one would want to ask: “are the conclusions strong enough and dependable”? The many different coding/measurement systems used in the sample of case studies drawn for the meta-analysis prohibits me from stating whether the findings are statistically significant. It allows only for statements of the findings and the assumptions embedded within them, and serves as the base for more detailed research.

Another way to look at the question of the internal validity of the study is from the perspective of Type I (implying non-existent relationships) and Type II errors (not detecting existing relationships). Meta-analysis does not really have a way to detect non-existent relationships, since such will be reported in vast minority of the sample studies. It is more likely to fail to detect existing relationships, if the sample is rather

small or the cases differ widely on how and what they were measuring/ reporting on. In this project, the sample of 76 cases and selection on a narrow subject for the study allows one to assume it to be good enough to provide conclusions that relationships are strong, moderate or weak.

Furthermore, external validity is also important. In looking at this, one would seek to understand the degree of generalizability, that is, can the findings of a meta-analysis performed on one type of organization be generalized to other types of organizations? Meta-analysis is one of the best techniques that allow the researcher to assume the greatest generalizability possible. First of all, it takes into consideration many other studies about chosen subjects, and brings them together. That allows us to detect which facts form the pattern across studies and which were accidental or outliers due to some specific settings.

Methodology Summary

The choice of research methods was suited to the goal of this project and based on the nature of the collected data. Both deductive and inductive research elements are incorporated into this meta-analysis in order to test pre-established variables and to find the unknown variable/variables: a factor, method or system that was suspected to exist somewhere in the DOD. Meta-analysis is an excellent method allowing for investigating and drawing conclusions from a number of previous studies. Content analysis of the cases was the next choice based on the nature of the subject and its presentation: descriptions, reports, explanations, narrative stories, and testimonies. The threats to the internal and external validity of the study were carefully considered in the research

design, coding, analysis and write up activities and every effort was made to minimize these to the greatest extent possible.

Figure 1: Illustration of Deductive and Inductive Process

The qualitative method of researching the subject in form of content analysis was chosen for this study. Meta-analysis was used to detect patterns across the cases in the DOD area. Deductive reasoning was used to detect if the pre-set of “parent” variables occurs in DOD. This set was then extended by new emerging variables.

Inductive reasoning was used to identify these factors and arrive at research conclusions based on the combined group of deductively and inductively derived factors.

Chapter Five: Data Coding and Univariate Description

When analyzing each case, I used both deductive and inductive coding processes simultaneously. I started with the list of eight variables and read each case to mark where the variable appeared as a starting point for further analysis. While reading the cases, other factors that seemed to be important to the organization's change efforts also emerged inductively. I would make note of the new factor within the case and would then go back and look at other previously reviewed cases to see if that factor was also evident. When I found a recurring pattern suggesting that this factor was not idiosyncratic to one case, I would add it to the list of variables that I was searching for during the coding process.

Thus, case coding proceeded deductively with a search for variables already present on the ever-expanding list and inductively in a search for factors that seemed to emerge from what I was reading. The "incoming" or new variables were not expected to match one of the original factors (variables) unless they clearly belonged there; it was anticipated to find something entirely new. No specific relationship between the known and / or unknown variables was assumed, until it became transparent in repeated instances.

Throughout this coding process, I was constantly observing the placement of one variable near others searching for underlying patterns suggesting causal relationships that may exist. As I progressed from a few to about the mid-way point in

case coding, I began specifically looking and marking the bivariate relationships as a means to confirm the causal connections that were inductively emerging. I expected to find certain causal connections based on the literature, primarily unidirectional relationships between the independent and the dependent variables as noted in the research design chapter.

Stages in Data Analysis

From this description of the case coding process, I submit that there were three main analytical stages in the research process:

1st stage: exploratory, moving from the specifics of each case to the general overall conclusion. Following the suggestions for conducting a grounded theory review of the cases, I started with a primarily deductive review of the cases with content analysis as the primary method. During this process, I inductively identified additional variables and then added them to the list of variables to code. This process continued recursively to previously coded cases and iteratively throughout all the case coding.

2nd stage: Identification of relationships that may exist between variables based on the proximity of other variables within the coding for a specific case. These relationships were tested in the same manner that I coded the cases for the variables.

3nd stage: quantitative analysis of the coded variables and the relationships between and within the independent and dependent variables, to estimate the strength of the relationships between variables based on their presence. The quantitative analysis was limited to percentages, since qualitative approach allows researchers to form rather

suggestive than significant conclusions.

Using this coding and analysis strategy, I next report the descriptive statistics for the original eight variables as well as for the 16 variables that emerged during the coding and analysis. Table 2 shows the original and added variables. Due to the large extent of variables across cases, below is a brief explanation of all organizational change factors found in the sample cases. In the discussion that follows, the magnitude of the variables' presence in the cases analysis is described to draw initial conclusions about their importance to organization change efforts.

Table 2: Variables that influence organizational change efforts

Original Variables	Newly Identified Variables	
Reasons for change	Doctrine	Learning
Leadership	Work organization	Time
People	Environment	Joint work / unity of effort
Communication	Politics	Authority / command and control
Structure	Money/Resources	Partial transformation
Culture	Change Process	Stakeholders
Planning	Safety	Innovation as change
Outcome of Change efforts	Computers/software	Change being changed

Descriptions of Deductively Identified Variables

Leadership – this variable was coded in a total of 68 cases, with an average of 3.7 occurrences per case. In general, this variable has one of the strongest influences across all cases. Very broadly taken, when it was coded it was looked at in terms of any

action/influence of the leader on the change process. Interestingly, not all the cases named a leader as a factor in the change process, the absence of the leader as an aspect can be a subject of a very interesting study. Nevertheless, in the 87% of the cases that did name leader as a factor, it was a powerful factor. It ranged anywhere from being very supportive to the transition, through passive examples to a disrupting, the most despised aspect of the transition. For example, Air Force General Merrill McPeak came to play a role of a detested outlier in one study. One cannot reflect his leadership in a few examples, but it is worth to provide at least a few (c. 106):

-"General McPeak's term has been characterized as the most turbulent and challenging period in the history of the U.S. Air…"

- he is seen as "…favoring pilots and making others feel as 2nd class citizens caused frustration…"

-"…the rapid time table and pace General McPeak set for the Air Force did not help make many of his changes popular. Some people thought change was being shoved down their throats and resisted appropriately…"

The leadership factor emerged in many perspectives: taking such forms as describing relationships with subordinates, in the form of leader's personality, style of leading etc. It is a very rich factor in terms of the variety of ways it surfaces and the power it can acquire. The power and significance of this factor could not be exactly measured here due to the chosen method of meta-analysis (which does not allow for significant statements), plus the subject itself deserves individual study and is different from the main goal of this research. Nevertheless, one can see it through some

examples:

-"… poor leaders cause domino effect of deteriorating the organizations and processes" (c. 14)

-"… leader's ability to achieve synergism in time, space, purpose and effect" (c. 183)

-"… creating a new image; open, tough, can take on anything. Innovator, rewarding desired patterns, demonstrated desired values, flexible, moving toward vision, cooperating with others…" (c. 7)

-"…organizational adaptation is largely a result of a leader's decision, choice." (c. 103)

pinpointing the teams functioning so well, that all of the members become leaders of the processes they are charged with.

Bottom line, the complexity of leadership was very well mirrored in the sample cases of this study.

People – this factor was coded in a total of 65 cases, had a frequency of 3.8 mentions per case. Like leadership, it is a variable with one of the strongest influences. Whenever employees (non-leaders) were the ones to influence organizational change in any way, it was considered as a significant factor.

It is the most easily explicable factor and just as rich as the leadership variable. People in DOD lived to the general standards and more or less actively opposed the

change just as their colleagues in the civilian world do. I do not recall a case where they succeeded to stop the transformation; however, they managed to remain a non-curable obstacle in over 9% cases. The people factor was seen in both individual and group actions, and often described their own values, attitudes, hopes dictating their behavior, their relations with management, and even their age. Following are a few examples:

-junior officers attuned to change implementation (c. 24)

-enthusiasm from those expecting to benefit from change (c. 24)

-it is within the human dimension that transformation of the culture in the Army began (c. 103)

-the senior leadership understood the compelling need for change, however the workforce did not see the same urgency (c. 35)

-increasing mistrust is related to greater cohesion in the workgroup (c. 101)

-bitterness and resistance to the entire transformation effort (c. 102)

Overall, as these statements suggest, DOD people seem to act the same in regards to transition as their colleagues in civilian organizations.

Structure – appeared as a variable in a total of 51 cases. On average, there were 2.4 codings of the variables per case; suggesting it had a moderate influence on organizational change efforts. When I read about things like the degree of formalization, span of control, or departmentalization, I coded this passage as structure. In general, one can conclude (not surprisingly) that structure is very complex in DOD; it is among the

heaviest, one of the most stiff and difficult factors in many organizations, especially the public and military ones.

"The size and complexity of organizations within DOD vary greatly …" (c. 65), which very easily leads to "the tragedy of commons" – complex systems containing many subsystems that may have that conflict with each other by design or management (c. 46). Not surprisingly, it appears in nearly 70% of the cases and is often mentioned as a barrier. The good news is that structure was changed to the advantage of the organization in nearly 40% of the cases. Hence, the structure in the DOD appears to be less stiff than thought of, giving hope the other organizations.

Culture – appearing in a total of 51 cases with an average of 2.0 mentions per case. Across the cases, this variable had a moderate influence on change efforts. Normally it was described with statements of a set of specific values, standards shared by members of an organization. Like structure, culture is a very difficult factor to change. Emerging for long years, it cannot be turned around with one decision and a signed paper. Even though it does have some flexibility, it appears to be behind the structure. Naturally, it surfaces more often as a barrier than an enhancer. Here are some examples of passages coded as culture.

- DOD is too reliant on technology and combat skills in solving what is complex, long-term problems requiring non-kinetic solutions (c.45)

-outdated military policies regarding human resources (from 19th century); YES people rewarded, totally dependent on boss's opinion (c.14);

-lack of planning culture and capacity (c.20);

-assumption that organizational culture equals collective behavior of leaders that others will follow (c.24);

-organizational support, fairness, rewards system is of an issue (c.111);

-the lack of understanding found within the interagency community (due to differing organizational sub-cultures, mandates, and resources) further complicates coordination efforts and [creates] demands [for] reform to enable full cooperation and unity of effort/ cultural bias, tendencies, and norms are difficult to overcome, particularly in the complex and diverse USG arena (c.53);

-working and fighting together forms a bond of trust that has enormous implications on the beliefs and norms that tie directly back to cultures (c.57);

-cultural change, create progressive environment open for constant change, (c.13);

-individuals and organizations that share the service and deployment culture (c48).

Even though cultural problems were often evident across the cases and generally were found to be difficult to overcome, culture was still an important variable to consider since it relates to the core values of DOD organizations in terms of patriotism and brotherhood.

Communication – found as a factor in 48 cases; and having a frequency of 2.5 codes per case. This variable demonstrated a moderate influence on change. When I read narratives emphasizing communicational habits, channels, networks in an organization, I noted the communication factor. The military seems to be making a very good use of this factor since it more often appeared as an enhancer, than as a barrier. Communication appeared to be an independent factor in change processes since it was seldom coded in combination with the variables for culture and structure.

-messages coordinated between commanders and forces (c.99)

-constant dialogue helped develop requirements (c.82)

-success stories continue to drive expectations (c. 43)

-doctrine written in a standard language promotes simplicity and eliminates language barriers; reduces confusion (c. 110)

-additional communication and support vehicles created (c.45)

Academic literature identified communication as a factor that was often not sufficiently used, such as using very few channels to communicate, not clarifying the message, using the language/jargon familiar to the sender, but not to the receiver etc. In reviewing these cases, it seems that the military manages well factors of communication.

A planned process for change- coded in 25 cases and appearing 2.8 times per case on average. The planned process variable has a moderate influence on change. A

lack of attention to the planning process often resulted in inappropriate or inadequate transition processes evidenced by policy disagreements and senior leaders' lack of full cooperation, mid-level officers left with their own intuition and continuing to use ad-hoc approach when solving problems. This made it difficult because at the same time they are still responsible for following the guidance, policies and orders.

The military developed an odd habit of ad-hoc planning. On one hand, it is somewhat understandable as usually war is chaotic and one is forced to make big decisions on the spot. However, DOD does not have to be as improvised as the war may be. The DOD got caught off guard by the environmental changes followed by the "new" enemy's unconventional attack and tactics. The new enemy was not new to the internal security forces, which now are forced to fully cooperate with the military.

And, that is a challenge to the DOD as well. Now DOD struggles to adjust to new geo political demands, new enemy, limited budget and volunteers, its own structure and procedures, and domestic and foreign cooperation at a new level. That is quite a lot of problems to struggle with at the same time, and a habit of ad-hoc planning does not help here. Mid-level officers are left to make better decisions regarding majority of the above-mentioned new challenges. Those officers most often do not need to be micromanaged, but senior officer support would help (although senior officers cannot come to one conclusion at their level), but very often is absent. A good regulation could be of help as well, but it is being constantly changed (an average of every 3 days!! c.31). A lack of cooperation between the senior officers does not add value in building an effective joint structure and culture for others to work within the organization. Case

37 describes extensively Pentagon's planning and decision support processes designed to be rational are anything but that; Pentagon planning problems are so complex that they defy intuitive judgment alone.

Reasons for change – the reason for the transformation may be assumed from the cases in the form of external factors, such as the environmental, geopolitical changes and unconventional enemy, and increased reliance on National Guard as a force (c. 56), -overwhelming chaos (c.7), -diffusion of threats across the globe (c.44).

Change outcomes - also referred to as a goal developed from current state of the DOD not being able to fight unconventional enemy. Hence we can assume this is what they should be after transformation: flexible, highly adaptive military able to fight conventional and unconventional threats (c. 13, 40, 42, 47, 49, 52, 53, 57, 58, 82, 94, 104, 110, 103, 171). The unconventional enemy that DOD is unable to challenge effectively often represents a poor change outcome because they do not have control over these elements of the external environment. This was suggested in comments such as:

- fighting an enemy that requires technological, intellectual, and cultural adaptations (c.13);

- ambiguous threat environment-from rogue actors employing unconventional methods (c.53);

Additionally cases referred to outcomes as results from attempts to change sub-procedures in a transformation process (c. 21, 74, 76, 183), or limited opportunities for

applying effects for producing desired outcomes while minimizing collateral effects and unintended consequences.(c. 74). Sometimes outcomes were not what was expected, as seen in this comment, even when the result of a specific policy or action can be readily observed, delayed and unexpected outcomes are rarely anticipated in full (c.76), or they were attempting to turn the organization to effects- based operations (c. 21 and 76).

Descriptions of Inductively Identified Variables

After the content analysis of all the cases was completed, the list of variables was extended to include the following factors:

Change Process – this variable occurred in a total of 65 cases, with an average of 5.0 mentions per case. I conclude that this variable is one of the highest influencers of change efforts. In coding this variable, it seemed to be very similar to the work organization factor. However, process of change is different since it pertains to implementing transformation, and changing the existing work organization. This variable represents an understanding by the case author of the process of changing the old system into new one. For example, the change process may have flattened the number of levels in the organization. It was assumed that it would emerge here as a method commonly used, but surfaced as a cluster of attempts, actions, carried out in order to implement transformation. That made it difficult to analyze. Those maneuvers were of various types and it is nearly impossible to reflect them here. However, most of them reflected the struggle of finding the right way of correct implementation process, learning from mistakes and trying to correct them.

Within the cases, the process was usually portrayed as difficult, challenging, and requiring a lot of critical thinking and analysis of what was going on and why. Once the "why" was answered; the next phase of "how" to change the disadvantage around/ how to remove the problem was started. Initially, this variable appeared to be quite promising in explaining change effort outcomes, since once the barrier was known – the solution was quite easy to state, i.e. misalignment between organizational structure and process of change (c.8) suggested that we need to align the structure to the current process. That is easy to see and state – the problem is how to realign those two? From this point on a vicious cycle of errors sometimes was repeated, depending on the accuracy of the chosen way of fixing the problem. There were many very interesting comments regarding the process of change, each worth a separate study. I can include only a few here:

-"…recognize limitations of "industrial age" organizations and given current conditions, consider new ways of organizing…" (c.40);

- "…revolutionary change disrupting ongoing operations and change itself..." (c.57);

-"… achieving a balanced approach as the most difficult part…" (c. 57);

- "…change triggers search for antidote …..Eventually the antidotes triumph …The solution, in principle if not always in practice, is to carry through …" (c. 61);

- "any time you attempt to reorganize, the affected area immediately develops

antibodies.…… Have the people respond to change as a friend, not enemy" (c.106);

-"… paradigm of technology ….. was overdone. Technological innovation slipped inadvertently into what began to approach a technophobic perspective… the best weapon system will never revolutionize anything" (c. 61);

-"…change must be overturning an existing order!" (c. 167).

In summary, I found this variable to be very similar to the work organization factor. However, the process of change pertains to implementing transformation, very often in form of daily actions. We can have pre-and post - transitional work organization and the process of changing it is the process of change; i.e. taking advantage of existing chaos (pre-transition state) and create more chaos (process of change) in order to implement desired change like breaking down cliques, starting new system of continuous training etc (c. 7).

Work organization – found in a total of 57 cases, and averaging 3.3 codes per case, the work organization was a factor with high influence on change efforts. Passages that described a set up arrangement of carrying out daily duties were coded with the work organization variable. It is understood as work set up prior to change occurrence. This variable seemed to be a major victim to changing environment. The organization of work has been built over long years and worked fine, but once the Cold War was ended, quite suddenly lost its effectiveness. It is also a dangerous factor, since little flaws in work organization can erode invisibly into major drawbacks, with painfully negative consequences. A similar situation was experienced by the DOD and other Homeland Security agencies when the tragedy of September 11 happened. In this case,

it was closely tied to structural weaknesses as well; the two of them devastatingly backfiring on the entire country. Some cases presented examples that question the whole purpose of having the military at all:

-headquarters not effective at sea and ashore… not able to conduct amphibious operations/ unable to deploy multiple MEB's independently (c.81);

Most cases reflected less extreme situations:

-work that produces measurable outcomes tends to drive out work that produces immeasurable outcomes / measuring the wrong things (c.21);

-poor contract supervision allowing to over-bill the DOD (c.183);

- never-ending turnover of personnel, prompting commanding officers do things differently than their predecessors – change for the change's sake (c. 32).

However, while trying to fix the work organization, many of the military leaders had a great idea of drawing from the academic literature, are taking advantage of the civil world solutions:

- Six sigma, continuous improvement process, organizational analysis and design (c. 28);

-environmental manipulation and open systems (c. 76);

-the OSF strategic analysis tool used to align organizational decisions with the missions (c.65).

It was a bit surprising, but also pleasant to see military officers seeking solutions on their own, without passively relying on DOD official guidance. It was also nice to find out that academic literature and professional guidance was helpful in enhancing the change efforts.

Joint work/unity of effort – found in a total of 52 cases, with an average frequency of 3.8. This is another variable with high influence on change efforts. The concept of joint work emerged from the "people" factor. Many times, it was clearly distinguished as joint work and did not "fit" into the people factor. When mentioned as a people factor, it would often reflect more about people's resistance to joint work because of their sense of the need for unique skills or abilities, more individual actions, or not working well in relation to leaders. When coded as joint cooperation / unity of effort it is an attempt to reflect the situation, actions of people coming together from different teams, units, branches, organizations and even countries, to try to form new bodies, establish new system, carry out a mission.

Joint work / unity of effort was a powerful factor in DOD change proceedings. It was derived from "people" factor. In the beginning, it emerged as one of the many ways that people were influencing transition, but quickly proved to be mentioned too many times, to be considered a sub-form of a variable. It was also clearly named as the "joint effort / cooperation", not as a consequence of people's behavior. Therefore, it was re-counted and treated as a separate factor. Joint work/unity of effort issues surfaced mainly as a result of enforced new structure (fusion / cooperation of many Homeland Security organizations). Having developed a deep rivalry between the DOD branches it

was difficult enough to bring those together to work, let alone embedding them in a new network with external institutions. These comments illustrate the coding of this variable:

-independence degrades effectiveness and ability to externally focus when attempting to fuse into joint force (c.110);

-erosion of individual service capabilities that were previously honed by the pride of competition (c.42);

-little or no processes in place to coordinate the interactions of each entity that contributes to fielding (c. 35).

In spite of many obstacles that aroused from merging people of different institutes, joint effort and interagency cooperation appeared many times in the cases coding and often contributed positively to the change efforts.

Environment – mentioned in a total of 55 cases, and having a 2.3 frequency per case. This is another factor with a heavy influence on change. Codes of this variable emerged when reading about things like an external vehicle forcing changes within the organization. In fact, the only reason for organizational change that was ever brought up in the DOD was the environment (and ultimately, this uni-dimensional explanation for change is why the original reason for change variable was dropped). This force was either in form of geo-political, economical pressures or in form of unconventional, country-less yet worldwide enemy with his unconventional attacks and tactics.

The environment was usually mentioned in two forms: either as unconventional

enemy using unconventional tactics or geo-political changes:

- non-state enemy forces operating around the globe in clandestine networks; new kinds of enemies—nonconventional forces, networked cells, gorilla bands—operating in new ways both compel nonconventional responses and provide new models for organizing from which we can learn (c.40);

-mistaken perception of the government regarding the country's safety (c.103);

- reduction in personnel anticipates support from external fixed and rotary (c.43) and similar issues.

In spite of its passive behavior in the last three decades, the military seems to be back to making attempts to manipulating the external environment. Environment has always been an excellent motivator for the Americans, starting from the first pilgrims. They took action in their hands, because they did not like what was going on around them. Since they did not have enough power to shape what was happening in Europe, they literally replaced the environment - with the American one, and tailored it to their wants from the very beginning. The trait of defining environment seems to be passed to each American generation and thrives on this continent. Such a trait, I bet, can be also found in every person coming to this country. Hence, a nation of risk-takers and standard- setters developed. The DOD, like other typical American organizations has been always striving to be the best in the world, in every meaning of the word. After the unconventional and surprising attack of September 11, DOD examines the threat and tries to turn around the external factors back to the US advantage. A few examples reflect benefiting from many external sources:

-technology (c.14) / enemy as a force/motivator that requires technological, intellectual, and cultural adaptations (c.13) / collaborative technology for distributing information (c.40) / technology allows smaller forces achieve greater effects (c. 98);

-outsiders' knowledge – "if you know the enemy and know yourself, you need not fear the result of a hundred battles. When you are ignorant of the enemy, but know yourself, your chances of winning and losing are equal. If ignorant of both your enemy and yourself, you are certain in every battle to be in peril." (c. 74);

-enemy's weaknesses - OODA Loop: observe, orient, decide, act by COL John Boyd. To combat enemy's OODA we change speed and direction faster: short-circuit enemy's thinking process which will produce opportunity for the enemy to react inappropriately, (c.10);

- Global War on Terrorism created the environment for transformation (c.43);

-changes with exogenous impetus appear to be accepted with relative ease by the acquisition organization: such "changes are generally adopted and acted upon with little significant resistance (c. 32);

- the best way to organize depends on the nature of the environment to which the organization relates (c.103).

Thus, the DOD, reflecting typical American rearing, tends to recognize the role of the environment in driving change efforts and likewise attempts to make good use of

the environment to suit their purposes.

Doctrine – coded in a total of 43 cases, with an average frequency per case of 2.3. This variable seems to have a moderate influence on change processes. The narratives that related to doctrine described the influence of set procedures, regulations, laws, and orders. DOD personnel are usually strictly obligated to follow them.

From a purely theoretical perspective, the obligation to follow doctrine has always been questionable, as it tends to restrain innovative solutions and strategic thinking. In the DOD transformation case it is of a particular concern since the doctrine itself does "lose" control of occurring processes, is very inconsistent and does not keep up with what has been going on. Without specific governing guidance, providing a means of unity of command or effort we cannot expect to be successful; working within a "coalition of the willing" framework will not suffice. This variable is like most of the others: a barrier, an enhancer and an excuse as well. Some of the regulations prevent a soldier and a leader from being effective, (particularly due to authority and chain of command regulations). Leaders have more room for being cooperative and can either allow or block effective work of a soldier when it comes to joint work. However "without specific governing guidance we cannot expect to be successful, working within a "coalition of willing" framework will not suffice" (c.47). While unity of effort can overcome many regulatory gaps, the ability of funding a mission and requirement of obtaining approval for major decisions can effectively block any process.

Doctrinal barrier is also an obstacle because it is being constantly changed; giving the leaders no chance to implement and follow it, but constantly reading the

updates and changing what was already changed (just 3 days before, c.31). Even though it's being changed so many times joint doctrine is (still) in a catch-up mode with modern war fighting tactics: "today the US doctrine cannot keep pace with the new technologies, info, systems and the people fighting the war" (c.43).

Authority/control and command – coded in 41 of 76 cases, and appearing on average 2.6 times per case. This variable has a moderate influence on change. Discussions of the assigned or assumed authority to carry out the task / mission; to make decisions and, or implement them were examples of when I used the authority code. Authority also reflected authority over subordinates and established or new way of commanding them and controlling their actions.

DOD experiences issues with authority**,** responsibility, freedom of deciding and command and control in a large number of cases. Wayne Taylor names unity of command as the #1 issue: "only one responsible commander" should be the rule (c.42); writing that: "the violation of this principle creates confusion, undermines authority, threatens stability, breeds irresponsibility and, if long-lasting, wreaks havoc." He also wrote, "Bifurcation of authority is a recipe for disaster." (c.43). The legislative part of defining authority / command and control issues seems to cause many problems while carrying out the process of change and delivering expected goals.

Money/resources – coded with 38 cases, an average of 2.2 times per case. This variable has a weak influence on change process. Common mentions of budget, funds assigned to carry out missions; resources in form of number of people available; technologies, tools obtainable in exchange for money were a basis for using this code.

There were other passages that included money or resources, but the coding was different. For example, the people as a factor was counted when the action, behavior of people was influencing the change; people as resource was counted when there was shortage of staff / forced change to cut staff due to budget constraints.

The importance of money in change processes is ever present and usually negative factor in all public companies. DOD has a given budget, and over most recent decades, it was severely cut due to perceived lack of threat. “Suffering from years of insufficient funding, the facilities, ranges, housing, and quality of life programs that form the core of the Army’s hometowns were in poor condition. Funding dipped to its lowest; accounts were often funded at 50 percent or less” (c.103). “Funding and programs were having a direct impact on increased retention of field grade officers and senior noncommissioned officers. It also indicated that readiness was suffering” (c. 103). Following the underfunding, additional problems developed as these comments suggest: “Parochialism turns negative when competing for limited budget, the gain of one service is at the expense of another” (c.110); “Money allocation does not mirror strategic priorities” (c.69);“Problems of control of resources & their application” (c.100).

However even here a few solutions have been identified and applied:

-“shift from a program-focused approach to an integrated cross-program process-focused approach that will align resources to more efficiently achieve the Coast Guard’s strategic goals. (c. 97);

- reuse what they have, before buying or building new. (c.95);

-particularly important was efficiency through standardization of support and services as well as reinvestment of the savings (c.103);

-recurring savings from the reduced excess (c.62);

-clear statements about the place the National Guard will play in the defense of the nation and other defense programs would help clarify budgeting (c.57).

It is undeniable that military deals actively with occurring problems related to money and resources. However, the low percentage of cases where this variable was coded suggests that the authors see that as a daily operating condition and not a special circumstance related to change efforts.

Learning – appearing in 37 cases, with an average frequency of 1.9 codes per case. This variable had a weak influence on all cases, but a moderate influence on the process of change within the cases where it was described. The learn factor reflects the education, awareness and training issues influencing transition.

Learning was often described as an awareness of the need for or the availability of training and education in support of the new processes and work duties that would occur after the change efforts. It surfaced as the commonly used supplemental factor in DOD change (out of those cases that had extra enhancers, learning was the most common). People, leaders in 45% of the cases turned to it for help. One could examine the reasons why in the other 55% cases' learning was not utilized, wondering why were they so sure of what they were doing? Learning factor was named as a challenge in some the cases, yet true to its nature, it usually served the transition process. Here are

some case conclusions about learning:

-significant challenges in separating relevant info from the background clutter and fusing data from multiple sources to deduce a coherent picture (c.44);

- understanding future threats is a constant challenge in the change process (c.44);

-how to design a training that is realistic enough (c.86);

-key enterprise change variable – people and knowledge (c. 28);

- turn attention to the different methods to assessing the most relevant effects across the dimensions (c. 76);

-relevant case studies and the literature provided the missing link between the corporate world and the institutional Army (c. 10);

-education, training- have a clear understanding and appreciation of the scope and function of participating institutions, including their capabilities, limitations, methods, viewpoint, and culture. (c.53);

-increase capabilities of partners—international and domestic (c.60);

-joint training (c.43).

Politics – appearing as a variable in a total of 28 cases, averaging 2.1 codes per case. Politics is a variable with a weak influence on change processes. Even though politics have been already stated as a part of environment, this new factor of politics

reflects more of “inside” political pressures on DOD. Many of the politicians are directly involved in shaping what is going on within DOD, such as the president - the commander in chief, secretary of state, secretary of defense, defense committees etc. These people frequently influenced the course of proceedings in the DOD.

Politics was really an inside factor in DOD change efforts. Many politicians work very closely with the military officers and serve as a link between DOD and Congress. Only about one-fourth of the cases named politics as a barrier, suggesting a good relationship and cooperation. Military officers seem to and play very active role in political networks, communicating, explaining, and pressuring in order to align political decisions with DOD goals. A few examples of political barriers and enhancers are below:

-a very real danger is asking any system to do too many things resulting in a system that does nothing especially well… (c.41, 45);

-subject to Presidential preference and administration turnover, (c.20);

-pressures, games, networks, cliques, have to keep community, politicians & union happy (c.7);

- Committees are dedicated to the military; military expertise is seldom challenged; authorizing participants work in closed groups that share the same interests of a safe country (c.183);

-military jargon - complicated and tedious – is being used by the military officers to their advantage while dealing with politicians (c183);

-retain a resilient network of alliances and partnerships (c. 60);

-charged with responsibility oversight officers, who have had no say about what is being done because of politicians (c. 40);

-Congress does not appear to have any type of expedited veto authority (constitutionality aside) that could prevent a proposed reorganization from going into effect (c.70);

- pay full respect to the authority of political context (c.61).

Time – coded in only 11 cases, at an average of 1.5 codes per case. As these numbers suggest, time has light influence on change processes. Descriptions suggesting a time shortage and time management problems were brought up in a few cases as a factor important in change process.

In the cases, there were mentions of a lack of time, constraints on time, and time management issues. The time factor emerged mainly as a barrier to change, rarely helping to make change efforts successful. Considering it was seldom brought up as a factor, one can assume that DOD personnel deals very efficiently with time constraints.

Below are a few examples of how "time" variable appeared:

-because of the schedule constrains there was no time to glean over the most useful information (c. 46);

-change is taking longer than anticipated (c.58);

-lack of time (c.30);

-unfortunately, after twenty years joint doctrine is not completely ingrained into our culture (c.31);

-"I knew that the things I most wanted to do in four years would have to be done in the first six months of my tenure. My advice is, if you don't do it in the first six months, then you can forget it" (c.106);

-ensure sufficient time for planning (c. 30).

Technology /Innovation understood as change – evident in only 10 cases, this variable also has a light influence on change. In the cases coded with this variable, it sometimes cases showed that innovation, technology was interpreted as an organizational change. That led to honest wondering why the new system is not producing the desired outcome. That factor was either identified by the staff and corrected or identified only by the case author and described as an example of how people try to carry out change.

Innovation understood as organizational change happened to happen in the military. On one hand it is no wonder, since DOD benefits heavily from acquiring the best technology available; however it brought some people to think it was the organizational change that was needed. Some examples:

-belief a quick organization change and a few technical solutions are going to resolve the Interagency Information-Sharing (IIS) conundrum. (c.95);

--do not confuse change with improvements or investment – it is human endeavor (c.13);

- Knowledge Management is more about people and corporate/organizational culture than it is about technology. Those that have been led down the path of a quick technological solution have most often and regrettably failed (trying to implement it solely as a technical solution (a box with a few wires) and not getting people involved early on) (c.95).

Partial transformation – originally coded in a total of seven cases, later it was considered to be an (incomplete) outcome measure. It has a very light but very powerful and significant influence on change in the cases in which it did appear. It is a sign of how DOD is implementing the overall transformation – by changing only some units, while others continue to work the usual way. That explained why transition is not synchronized, proceeds at different pace and gives in to a commander style, effectiveness, personality. It significantly postpones and hampers the overall DOD effectiveness. Surprisingly, this factor was mentioned very seldom. Maybe that is because the authors were focusing on the details of change implementation applied to a unit / a company / a brigade, seldom referring to the overall DOD transformation proceedings.

Another problem that occurred in only a small number of cases is that only some units get transformed, while others must wait their turn. Some units transform in revolutionary way (c. 87), some in incremental – there has been never a final decision made about it, it was up to a commanding general, i.e. while most or all of the active

Army's combat brigades will be transformed to the UA structure, the rest of the Army will still be organized along traditional lines….(c.46). Amazingly, a factor that would seem very important on its face validity was distinguished only in seven out of 76 cases.

Safety – was a focus in a total of two cases, suggesting very light, but worth noting, influence. The safety of DOD personnel and/or the civilian people sometimes emerged as a factor that ultimately shaped the proceedings of change. Safety appeared only as an obstruction to the change processes, and even here, half of the time it was safety of the data, not the personnel as one would expect for organizations with a war fighting mission.

-safety restrictions are problematic due to cost and complexity, safety, confidentiality and confidence level of data (c.8);

-lack of attention to issues of security (c.40).

It was a bit surprising to see military not bringing up the safety issue, but perhaps this can be explained with the understanding that whenever the military is attempting to achieve its mission, the safety of the personnel will always be at risk and not something that the organization can try to change.

Computers and software architecture – also mentioned in only two cases. This variable included descriptions of how technology can shape the way communication and performance is carried out. In one case, it was brought up as a significant factor in change proceedings. Computers - software architecture did not appear as a common factor, but was named and, looking at the examples below, was

important to explicitly consider.

- Software architecture to be aligned with organizational structure and communicational patterns-which may evolve; to serve as a bridge between the goal, the system and its implantation (c.8);

-flexible enough software to be able to handle future change (c.8);

- taking advantage of the strengths of the workers and each software application: assign them where best suited. (c.10).

Stakeholder – this variable was important in only two cases, but was specifically named as such by the authors. Suggested some stakeholders of Department of Defense and brought up as a factor in the description of change. This factor appeared solely as a barrier, mentioned as below:

-stakeholder artificially chosen; leader, people excluded as such (c.24);

-compelling need for change was not fully embraced or accepted by all partners and stakeholders (c.35).

Change being constantly changed – was a factor in only one case, but upon discovering it I wondered why it did not have more mentions across the cases since it seemed to be very powerful variable in my view. One can assume that a constant change of regulations applies and affects nearly every leader carrying out change. I imagine many cases focused on describing the actual process of undertaken change without reflecting the irritating companionship of constant updates shoved up on them.

It also may be a result of the different perspectives of organizational change that case authors were concentrating on.

Bottom line, the relative strength of the variables was measured by their occurrence. Due to this fact, the following factors: time (11 cases), technology understood as change (10 cases), partial transformation (7 cases), safety (2 cases), computer systems (2 cases), stakeholder (2 cases) and change being constantly changed (1 case) were dropped out of further analysis. However, they cannot be completely discarded, since if they do occur in a particular setting, it is for a reason and their influence in such situation is very significant.

Chapter Six: Data Analysis and Research Findings

In Chapter Five, we described the variables that were coded and presented information about the frequency and magnitude of the variables within the data set. One conclusion that we reached was that the factors that had the most relevance in the DOD cases were two of the originally identified variables (Leader and People) and four were newly identified variables (Doctrine, Work Organization, Change Process, and Joint Effort). The less commonly coded variables were culture, structure, communication, environment, authority/control and command, money/resources, planning, politics and learning.

There emerged a third group of factors that had very low frequency in coding: time management, safety, stakeholders, and software. Even though they may have been important in a specific case, they were not recurring and thus are dropped from further analysis due to the very low occurrence.

As suggested in the previous chapter, deeper analysis of the cases in which the partial transformation and technology/innovation understood as change variable indicated that the authors were really describing a current outcome of the DOD transformation. So, for the remainder of the analysis, they are incorporated into the outcome measure of change dependent variable and will be looked at in this way.

Searching for the specific reasons for change, I found that within the cases it was always mentioned as taking the form of an external force such as geopolitical changes and the emergence of an unconventional enemy. In re-examining the cases to determine what narratives were providing insight into the impetus for change, I realized

that there were narratives in the cases that did describe WHY they were changing. Instead of coding them as a reason, I had instead coded them as being an environmental factor.

Determining this to be the case in many instances of the environment variable coding I have eliminated this factor, reason for change, from further analysis and report the instances that tell why using the environment codes reflects more accurately the perspectives of the case authors. Using this coding and analysis protocol, the frequency of the environment code is an appearance in a total of 55 cases, with an average of 2.3 codes per case. This factor, then, can be assumed to be the primary, and nearly universal, reason for change in DOD.

Starting with these findings about the variables that emerged as being important and continuing on to deeper analysis, this chapter introduces two important new variables that emerged in the case review as intervening between the independent and dependent variables. I reviewed the different forms of analysis undertaken to uncover the bivariate and multivariate relationships within the set of variables.

Analysis of Bivariate and Multivariate Relationships

After all the cases were coded on the deductive and inductively identified variables, the next step in the analysis was to look more closely at the relationships between the variables. To accomplish this there were three different types of analysis performed.

Type A Analysis: In this analysis, I re-analyzed each of the coded items to determine if they represented barriers or obstacles to the change efforts or if they tended to be an enhanced of the change efforts. Conclusions from content analysis were gathered and summarized as either a barrier or an enhancer and are presented in the form of percentages. The purpose of the Type A Analysis was to provide an answer for the overarching question of the study: what are the barriers and enhancers in DOD change? As well as: what are relationships between the factors that influence change efforts in the DOD?

Type B Analysis: during the content analysis a pattern emerged: it appeared that there was nearly always a turning point during the transition processes in the DOD organization's change efforts. To confirm the prevalence of this underlying pattern, I conducted an iterative analysis that I have labeled the Type B Analysis. Since this turning point was not described in the literature that guided my inquiry, the Type B analysis serves as an additional means for answering Research Question #3.

Type C Analysis: in the final round of analysis, conclusions from the qualitative examination of the deductive and inductive variables were grouped in a variety of ways and used for quantitative analysis in order to distinguish/estimate possible relationship between variables, patterns based on their presence in the cases. This analysis resulted in a logic model to describe the causal relationships between the most important variables drawn from the cases and thus is intended to be an additional means to answer Research Question #4.

In each of the three types of analysis, causal relationships between variables were never assumed unless they were transparent in a majority of the cases studied. The overarching question guiding this research was whether there are factors affecting organizational change in DOD that are not already identified in the extant literature and what was the role of the leader throughout the process. In each type of analysis, A, B, and C, I performed special sub analysis to isolate the leader variable and to provide information that would assist me in answering Research Question #2. In much of the change literature, the identified method of managing change tends to point more to the correct identification of a single factor rather than to any interactive relationship between variables. The ultimate purpose of the Type B analysis (comparison of factors' occurrence) was to attempt to detect/observe inter-relationships between the independent variables as they act on the dependent variable.

Type A Analysis – Identification of Barriers and Enhancers

The primary focus of the Type A Analysis was to identify what barriers and what enhancers were described in the 76 cases included in this study. To answer this question, a detailed content analysis of every case was first performed. Any factor that was pointed out or surfaced as influencing change proceedings was categorized as a either a barrier or enhancer and then coded with a second code to reflect its source. The analytical protocol is demonstrated by this example:

Case 7 was from the very beginning full of statements like "…agency fallen into chaos" (p.35), "chaos created by Barry's administration" (p.57), and "surrounding chaos" (p.59). The use of the word chaos seems to be describing that the state of an

organization was clearly an existing barrier to virtually everything, and especially to the change efforts. Thus, the barrier code was assigned to each passage. Then, the source of the barrier was also coded. When the author refers to Barry's administration, he is referring to the previous leader, so the leader code was assigned to this passage as well and recorded on the code sheet in the barrier column. Likewise, the author refers in the first passage to the agency, so that passage received the codes for barrier and work organization.

The role of the new leader (Ramsey) in the change efforts, and particularly in dealing with the chaos left behind by the previous leader, (Barry), was clearly an important element in overcoming the barrier to change and moving the process forward. Drawing from the same case, we see a description of an idea the new leader came up with:

"He intentionally took advantage of the surrounding chaos in the political community and created a little chaos within the police department. He wanted an operational setting that would give him an advantage as a stranger in the land he created as opposed to the land he inherited. Now everyone had to figure out where they belonged and the new rules of operations." (p.59) … I had to take the opportunity to change things around…I had to strike really quickly. The window of opportunity was there and I took advantage of the chaos. Chaos is not always a bad thing" (p.59), "Ramsey encouraged … to visit chaos long enough to break up an unhealthy stability and to create the new shared operational reality." (p.60) … changes helped to block forces against Ramsey's effort of defining a new reality, Again, he saw the window of

opportunity created by the chaos to create something new" (p.64).

Clearly, the new leader needed to be coded as an important variable in this passage, so it was coded as leader. Also, his idea of taking advantage of chaos to create more chaos to break unhealthy stability and create a new operational reality, suggesting the chosen way of changing the situation, so two more codes were noted in this passage: process to reflect the importance of the process of change and enhancer reflecting the positive source of overcoming the barrier to change efforts, the new leader and the steps he took to change the situation.

Table 3 reflects all the factors used for the data analysis and reports their occurrence in form of a barrier and an enhancer. Each side of the table (barriers and enhancers) is rank ordered to report the variables with the most frequency.

Table 3: Incidence of Barrier (B) and Enhancer (E) Codes in the Cases

Barrier in # of cases	Variable Name	Variable Name	Enhancer in # of cases
56	Leadership	Change Process	59
55	People	People	55
50	Work organization	Leadership	53
48	Change Process	Joint work/unity	45
45	Doctrine	Communication	42
44	Environment	Structure	34
42	Culture	Environment	34
41	Structure	Learning	34
33	Joint work/unity	Work organization	32
32	Communication	Doctrine	32
30	Authority / Command & Control	Authority / Command & Control	29
28	Money/Resources	Culture	28
25	Planning	Money/Resources	28
20	Politics	Planning	17
11	Learning	Politics	14
9	Time	Time	4
9	Tech./Innovation. mistaken for change	Tech./Innovation. mistaken for change	2
5	Partial transformation	Computers/software	2
2	Safety	Partial transformation	1
2	Stakeholders	Change being changed	1
1	Change being changed	Reasons for change	0
1	Computers/software	Outcome measure	0
0	Reasons for change	Safety	0
0	Outcome measure	Stakeholders	0

After assigning a code to the case content that represented a barrier or an enhancer, the next step was to determine the most common patterns that occurred and to document which factors occurred in how many cases. Provided in Table 4 is a little part of the BARRIERS's summary table reflecting the cases it appeared as a code in. Thus, a leader factor appeared as a barrier twice in case # 24. The letters right next to "24" are "Tol" and "CC". They reflect yet another group of factors that were emerging as important leader as a barrier due to type of leadership (TOL) and the other – ineffective

leader as a barrier due to not adequate control/command (CC) s/he had. Those additional factors were also counted and included in the Type A analysis. The same form of analysis was completed for the ENHANCERS; an excerpt of the results is provided in Table 5.

Table 4: Excerpt of Cases with Barriers & the Secondary Variable Coding

Stakeholder	Leader	Communication	Structure	Work organiz.	Culture	People
24	24 tol	24	24	24 cc	24 cc	24
35	24 cc	29	7	24 tol	24 tol	24
	29 cc, tol	8	8	7	111	111
	7 tol	8	8	8	8	111
	8 tol	12	8	8	13	111
	8 tol	40	12 un, jt	10	14	111
	10	30	12	10	20	7
	12	47	14	12	20	8
	13 tol	47 jt	30	12	40 tol, a	8
	14 tol	53	30	12	30	12
	14 tol	53 un	47 jt,a	12 2t	47 jt,a	12
	20	95	57 env	14	53-jt	14
	30 a	95 jt	57	14	53 jt	14
	47	95	57	20 JT	57 env	20
	47 cc,a	37	70 a	20 JT	95	2

tol: type of leadership
cc: command and control
a: authority
un: unity of effort
jt: joint effort
env: environment

Table 5: Excerpt of Cases with Enhancers & the Secondary Variable Coding

People	Environment	Politics	Money/resources
24	29	12	53 a
24	12 jt	13	57 pl
111	12	20jt	57 pl
111	13	103	95
111	20jt	103	95 pl
111	20jt	100	103
8	20jt	31	103
10	20jt	102	62
12	20jt	61	37
13	20jt	110	106

jt: joint effort pl: planning a: authority

After the re-analysis of the cases was done to identify the primary, secondary and in some cases, tertiary relationships that existed between evidence of barriers or enhancers and the other variables, the next step in the Type A Analysis was to draw conclusions about the most important interrelationships between variables and how they could lead to a barrier or enhancer for the organizations' change efforts. Table 6 reflects the barrier and enhancer in order from the most to the least common:

Table 6: Major Factors Representing Change Barriers or Enhancers

% of 76 cases	BARRIERS	ENHANCERS	% of 76 cases
73%	Leadership	Change Process	**78%**
72%	People	People	**72%**
66%	Work organization	Leadership	**70%**
63%	Change Process	Joint work/unity	**59%**
58%	Environment	Communication	**55%**
55%	Culture	Structure	**45%**
54%	Structure	Environment	**45%**
43%	Joint work/unity	Learning	**45%**
42%	Communication	Doctrine	**42%**
39%	Authority / command, control	Work organization	**42%**
38%	Doctrine	Authority / command, control	**38%**
37%	Money/Resources	Culture	**37%**
33%	Planning	Money/ Resources	**37%**
26%	Politics	Planning	**22%**
14%	Learning	Politics	**18%**

What is surprising from these results in the table is that the most common barriers of change are nearly the same as the most common enhancers. Leadership is ranked as the number one barrier, occurring in 73% of the cases studied. When considering the most important variables that can enhance the change process, Leadership is listed again in 70% of the cases and is the third most important variable in the enhancers list. The variable for People is the second most important barrier as well as the second most important enhancer. The last most common variable that is duplicated in the table is Change Process, coded as an important barrier in 63% of cases, and appearing in 78% of cases analyzed as an enhancer.

When this pattern emerged, I performed additional in-depth analysis in order to find out more about the barriers and enhancers. Below are examples drawn from the cases illustrating how the same factors had both a negative and positive influence on the

organization's change efforts. These randomly chosen examples illustrate how a variable was both a barrier and an enhancer and that once a problem was identified during the change effort, the solution imposes itself. For example, in case 24, I found that the barrier was a lack of guidance from the leader. Then, in the case narrative, I later found documentation that the leader was engaged and provided guidance, which therefore resolved the problem.

Table 7: The leadership variable as barrier and enhancer

Case #	Barrier	Enhancer
24	People frustrated w/ lack of guidance	Leadership support
14	Poor leaders cause domino effect of deteriorating the org & processes; toxic leader = toxic organization	Get rid of toxic leaders; develop & maintain quality leaders; repair basic foundation of leadership
30	Ineffectiveness due to lack of controlling and authority	Seamless C&C for the leaders
57	Ignorance of the unique challenges that RC leaders face is still pervasive with AC leaders and vice-versa. This gap reduces the speed of integration and effectiveness of inter-component	An exchange program between RC officers and AC officers will help bridge this gap of understanding unique capabilities &challenges. The exchanges will have second and third order effects as participants return to their component and share their experiences

As one can see from Table 7, leadership surfaces as an extremely influential variable in the transformation process from barrier to enhancer. The case analysis reveals that it is also a very controversial variable as well. In many of the cases, I discovered a recurring theme: How does one tell the leader, they are the problem here? In the DOD it was mainly the top management and/ or politicians (yet, another type of leader) that had the ability to make this observation and, also, the tools to turn this factor around. This transition from barrier to enhancer was often accomplished by granting more flexibility, giving more authority, modifying the law, changing structures

or even getting rid of the toxic leader. In cases where the leader was a barrier, the organizational structure was often an aid as well. In the military, it is traditional to frequently rotate leaders to a new duty post within the organization chart. When this happened, the new leader who joined the organization identified the mistakes of the old leader and corrected them.

Sometimes leaders proved to be so open minded that they recognized their own errors and rehabilitated themselves. Many times, guidance from the subordinates was honestly and openly asked for by the leader. When this happened, the transition of the leader variable from barrier to enhancer was obvious. The point of the change process was to identify where the problem was, from there the leader could proceed to correct it.

As predicted in the organizational change literature, another important human systems factor – people – and in particular, the subordinates of the leader, surfaced as both a barrier and an enhancer in a majority of the cases analyzed. Following are a few examples:

Table 8: The people variable as barrier and enhancer

case #	BARRIER	ENHANCER
100	Institutional loyalty to the parent organization conflicts with loyalty developed to the JIACG through close coordination with other members.	create unified interagency staffs at each of the regional commands to augment or replace the present military-centric Combatant Commands
106	Any time you attempt to re-organize, the affected area immediately develops antibodies	Have the people respond to change as a friend, not the enemy
15	subordination of individual interest to general interest is the largest obstacle to overcome	develop an atmosphere focused on collaboration and unified purpose
99	one of the critical challenges of executing IW is lack of assessment / warrior's ability to assess effectiveness is limited	situation was improved w/aggressive education / were cross-trained

As one can see from the case comments presented in Table 8, people in the military often cause the same problems during the change process as those in civilian world. Common examples of barriers are resistance, unwillingness to give up on their individual advantages for the sake of the new organizational goal, not fully embracing new structures, teams, etc. Case 106 for example reflects "some people thought change was being shoved down their throats and resisted appropriately"(p.27); or not understanding and therefore resisting as in this quote: " The new uniform was a stupid, minutia thing. With the big-time stuff such as cutting people and planes going on, to fool around with the uniform sort of trivializes his time" (p.31); and resisting out of fear: "What happened was, we went from 203 wings (people) to something less that 90 on active service."

People usually resist change for a variety of reasons: they are afraid of its consequences; they do not understand the need for it, they are forced to abandon work

organization that they have gotten used to. The astonishing fact, when considering the people variable as both a barrier and an enhancer of change efforts, is that quite often the shortcomings of established routines are seen as natural occurrence everyone deals with. It usually takes a powerful, and sometimes an external, force (i.e. a new leader, environmental/political/economical changes) to pressure acknowledgment of the barrier and to foster an appropriate response to existing arrangements.

Another very important factor in DOD was determined to be the work organization. Like leader and people, coding of this variable suggested that it also played a dual role as a barrier and an enhancer, as suggested in the next table:

Table 9: The work organization variable as barrier and enhancer

case #	BARRIER	ENHANCER
100	Under-Secretary level and the meetings occur in Washington, with representatives who are often unfamiliar with facts on the ground. Understandably, the Washington perspective often varies widely from that espoused by officers in the field	Integrating different perspectives at a lower level, with the regional Under-Secretary able to give a consolidated response plan to the Secretary.
56	competing National Guard missions (federal and state) / Guard structure must be changed from a "Strength/Legacy Based" structure to a "Capabilities Based" / mission imbalances have brought the Guard close to the breaking point	Guard structure must be changed from a "Strength/Legacy Based" structure to a "Capabilities Based" one / - capitalize on complimentary aspects of the state and federal missions, harmonizing the National Guard's capabilities with its broad responsibilities
28	lack of integrated, cross enterprise knowledge needed to support & make rapid, accurate decisions	Stove-piped data must be horizontally integrated & shared. / 6-sigma/cont. improvement process, org analysis
46	The tragedy of the commons.[50] Complex systems contain many subsystems that may have goals that conflict with each other by design or management. (Garrett Hardin.)	understand where the system is currently, what needs to be changed or improved and finally what the desired end-state of the system should be

Everyday people may complain of faulty work organization (i.e. subsystems ending up having contradicting goals – c. 46), but it is definitely up to the leader, whether formally designated or informally recognized, to recognize the problem and do something about it – preferably choose the best solution. The obstacle of inefficient work organization usually will not correct itself. Based on the leader's choice the problem either snowballs into a crisis or brings tremendous benefits when successfully addressed. The point here is to recognize the obstacle and appropriately respond to it.

The change process of transforming the organization proves to be another powerful factor that can be either a barrier or enhancer. In the next table, I provide an example of how this variable emerged in relation to the barrier and enhancer variables to illustrate:

Table 10: The change process variable as a barrier and an enhancer

Case #	BARRIER	ENHANCER
100	Both strategic and operational direction was confused. Coordination problems were often met by simply expanding the number of officers working on the problem, rather than attempting to create a managed solution	Align interagency operating areas, and utilize existing interagency planning documents across the interagency process.
58	When and how the functional and multi-functional units will finally align was still undetermined / the most difficult part of the transformational process was achieving a balanced approach. Chapter II in the 2001 QDR best explains this approach by stating, "A balance must be struck between the need to meet current threats while transforming the force over time."	The result of this planning effort led to the development of four strategic objectives- Given the guidance, the services could better focus their transformational efforts to meet the strategic objectives
28	the processes to CH & the implementation of the processing centers are not synchronized / software developing funding instability forcing schedule slippages / CH programs suffer from instability, delays, quantity adjustments, CH in schedule, implementing new CH programs w/out evaluating them	begin with fully developed and evaluated change program
46	While most or all of the active Army's combat brigades will be transformed to the UA structure by 2007, the rest of the Army will still be organized along traditional lines! / The problem is not change itself, for change is ubiquitous.[10] The problem lies in managing change and shaping it to meet the desired ends, decreasing the unknown by analyzing effects of proposed changes and their possible unintended consequences.	design to work in conjunction with other transformation efforts/ understand where the system is currently, what needs to be changed or improved and finally what the desired end-state of the system should be
7	Chaos	Taking advantage of existing chaos and creating even more of it in order to change the systems, break down cliques, impose desired changes, shape new social reality using; using turning events for change advantage

It was mentioned previously that once an obstacle is identified, the solution is self-imposing. For example, when a problem is in-between branches deeply rooted rivalry solution, there is often an attempt to eliminate cultural differences suggesting integration. The trick is to find an effective way to (in this case) promptly eliminate the rivalry. In spite of the presence of a self-imposing solution, the process of changing the

barrier may be not as obvious. The turning point in the case of the change process variable is a choice of the best possible solution, and it is naturally subsequent to distinguishing an obstacle phase.

Based on the high level of overlap documented for the leadership, people, work organization, and change process, it seems reasonable to conclude that the barriers in the process of change CAN become or actually ARE the enhancers of change. In fact, this conclusion has some justification in the literature. Identical assumptions can be formed based on the models and research of Kotter (1995), whose barriers are the same as enhancers of the change process. The authors of case 28 draw a similar conclusion "It is interesting to note that while meeting transforming needs, the solutions for those needs, more often than not, are significant attributes of the highly successful, flexible and adaptive organizations" (p.6).

In order to verify the conclusion that barriers can often become enhancers in the change efforts, I added an additional step to the Type A Analysis. This was accomplished by returning back to the 76 cases and documenting for each the bivariate combinations of barriers or enhancers and the 24 study variables. The result from this analysis was a new table showing the barriers and enhancers in a slightly different format. Table 11 provides a portion of that analysis.

Table 11: Barriers and Enhancers for each Study Case

case #	Barriers	Enhancers
7	env, org, str, polt, pr, ldr, ppl	pr, ldr, comm.
8	org, str, ldr, pr, sft, ppl, lrn, comm, cult, comp, doct	pr, lrn, str, comm, ldr, ppl, comp
20	polt, org, env, cult, ppl, ldr	ldr, ppl, env, org, lrn, str, doct, polt
70	doct, str, polt	doct, pr, comm, env, str
68	cult, ppl, org, $	cult, ppl, org, $
82	env, pr, org, ldr, ppl, cult, str, doct	ldr, pr, env, ppl, $, lrn, comm.
87	str, org, pr, $, ppl, cult, doct, env	str, lrn, ppl, cult, doct, ldr, comm, org, pr, tm, $
61	ppl, cult, pr, env, org, ldr, doct	pr, ppl, cult, ldr, polt
15	str, doct, ldr, comm, ppl, env	doct, ppl, $, str, comm, ldr, cult
94	lrn, $, ldr, env, doct	env, doct, pr, ldr, lrn, ppl
90	Str, org, polt, $, ldr, doct, comm.	Str, comm., org, polt, $, doct

Key: blue font variables are reflected on Barriers and Enhancers lists,
black font variables are those that are not reflected on Barriers and Enhancers list

Env: environment	org: work organization	str: structure
Polt: politics	pr: change process	ldr: leader
Ppl: people	comm: communication	sft: safety
Lrn: learning	cult: culture	comp: computers, software
Doct: doctrine	$: money, resources	

In Table 11, one can easily see that barriers and enhancers often have the same bivariate relationship with the independent variables in the vast majority of the cases. For example in case 7, there were seven variables that occurred simultaneously with barriers (environment, work organization, structure, politics, change process, leader, and people). For this same case, there were three variables that occurred simultaneously with evidence of a change effort enhancer: change process, communication and leader.

As is highlighted in the row for case 7, two variables have simultaneous relationships as both barriers and enhancers: change process and leader. The above table served as a base for a number of numerical comparisons, which are described in the Type C Analysis.

Going back to analyzing the most common factors identified in the study, one can notice that barriers to organizational change are largely pre-existing, which means they do not occur during the change, and are not new issues. They were in the organization previously and worked well in the "old" environment (except for people and their resistance toward change). Since the organization's operating environment has often changed in many aspects (geo-political, financing, technological etc), the previous structures, procedures and cultures all of the sudden have lost their effectiveness. What is revealed by this analysis of barriers and enhancers is that once the barriers are identified and adjustments are made based on the new situation, the barrier is not only eliminated, it actually undergoes a transformation process and becomes a change enhancer.

This conclusion should not be surprising since there is a great deal of anecdotal evidence of this same transformation in everyday stories about the military and how it has changed over time. For example, work organization evolved during the times when an enemy was known, identified and in much weaker financial position. The technology was heavily biased in favor of the American Armed Forces providing a unique war fighting advantage. Seldom was there a need for constant joint mission with other military branches, let alone other governmental organizations. The same factors shaped

the way of leading, where commanders had the procedures to follow. People also were comfortable with known system, environment, and predictability. However once an unidentified enemy ("country-less" group of terrorists present in many geographical areas) struck using non-military forms of aggression (such as small cell terrorist operations), the world was turned upside down.

The work organization that had been quite successful since the early days of the American military experience was no longer responsive in many ways to current situation, i.e., one can go fight the war, but what do you do where there is no battle place? Throughout these changes in the operating environment, the work structure and related standard operating procedures have lost their significance. The new war fighting missions required tight cooperation with other branches and outside organizations, but it turned out that the leaders cannot come to terms about mutual work and left the people working in rapidly set-up multi-systems, responsible to more than one person while they were trying to put something together. In such an environment, the war is being carried out, and the DOD must undertake change efforts to transform the military.

Thus, a big challenge is to identify the barriers and find a good solution for them. Once it is done, the barrier not only disappears, but also very often accelerates the change process and the further organizational functioning. As Entin and Serfaty (1999) describe, high-performing organizations demonstrate improved coordination when they recognize high degrees of incongruence. And, this is why one should start from identifying the problems in the system. That would give enough pointers of what needs to be done to change the system and recognizing enhancers of the process.

Analyses in this perspective were performed on all 76 cases in order to understand why and how the same factor could be a barrier and an enhancer in the same situation. The conclusion emerging here suggests that not only identifying the problem helps, but also addressing the barrier using many of the variables analyzed in this study and responding to the change effort-specific barriers in the best possible way. Thus, the new, extended theory would be as follows: the barriers in the process of change CAN become or actually ARE the enhancers of change, once identified and properly addressed.

Exploring Leadership

Since one of the research questions addresses leadership, and it frequently occurs in the DOD, I took a closer look at what was behind the leader factor in the DOD. The leadership variable emerged in a few ways, summarized below.

The leader variable occurred in 73% of the 76 cases as a barrier and in 78% of the cases as an enhancer. Closer examination of the cases allowed for differentiation of different interactive relationships between the leader and another variable. For example a leader could have been a barrier due to his leading style, or maybe he had poor planning skills, or he was blocking the change progress because there was no unity of effort between his unit and another military unit. A summary of the number of times that the leader variable was interacting with other independent variables in presented in Table 12.

Table 12: Interaction between leader and other variables

LEADER AS A FACTOR	Barrier	Enhancer
Type of leading	27 times in 17 cases	25 times in 19 cases
Authority / Command & Control	20 times in 15 cases	22 times in 19 cases
Joint effort / unity	20 times in 14 cases	22 times in 18 cases
Planning	15 times in 10 cases	6 times in 6 cases

As we can see from Table 12, there were fifteen cases where the leader experienced a lack of authority or proper command and control and this made the leader ineffective, thus leader was coded as a barrier. On the other hand, the type of leader contributed to the change process as an enhancer in 19 cases. Lack of joint effort and unity between the cooperating leaders emerged as a barrier in 14 cases. In 18 cases, leaders were able to overcome their differences, come to terms and push the transition forward. Leader's planning skills surfaced as a barrier in 10 cases and as an enhancer to the change in 6 instances. The authority, joint effort and planning are pretty self-evident, however the type of leading coding is a bit more complex, thus it is examined closer next.

In 16 cases the type of leading style served as an enhancer to the change process, the leader was characterized as being a transformational leader. For the cases where the leader was a barrier ineffective (13 times, as a barrier) and autocratic style (7 times, both as a barrier and enhancer). Other mentioned styles were task (4 times) and people (2 times) oriented. Transformational style was set from the beginning in 7 cases and turned into such (in process of correcting leading style) in 9 cases. Ineffective leading was referred to in cases as emerging due to lack of education, experience, organizational skills, being indecisive etc. Ineffective leadership was transformed into

other leading styles 9 times, and remained not-altered in 4 cases. When transformed, ineffective leading was usually changed into transformational style (7 times), or autocratic (2 times). Consequently, transformational leading comes into view as the most common one, followed by ineffective (usually replaced with other style) and autocratic style.

In the next step I examined the leadership style in the "full" (where the majority barriers were transformed into enhancers) and "mismatched" (where barriers did not match the enhancers; see Table 12) cases. There were 21 full and 7 mismatched cases pointing out the leader's style as a factor in change process. The analysis resulted in discovering that none of the mismatched cases where there were more barriers than enhancers had transformational leaders. For the seven mismatched cases, there were five ineffective and two autocratic leaders. Moreover, in these seven mismatched cases there was only one case with a change of leader; the new leader who was autocratic replaced an ineffective leader. In the other six instances, the ineffective leader remained as such throughout the organizational change proceedings.

Twenty one full cases (where barriers were the same as enhancers) reflected 11 transitions of leading styles. All of these cases showed that every ineffective, poor leader was replaced with a different one. Not a single ineffective leader was let to remain as such. Out of the 11 changes of leading style, nine ineffective leaders were replaced with transformational ones, one leader was replaced with someone who was task and people oriented, and one replacement for ineffective was with an autocratic leader. There were also 10 cases where leading style remained the same throughout the

transition; these were seven transformational leaders, two autocratic leaders and one people oriented leader.

Table 13 summarizes the leading styles across all 21 cases that were well matched between barriers and enhances. From this table, we can conclude that 16 transformational leaders, three autocratic, one people oriented, and one people and task oriented leader were present. Based on this evidence, it seems that the most effective leadership style for a DOD change process would be the transformational leader. This is quite similar to what is suggested by the leadership literature in chapter two. It is not that surprising since these cases were mostly drawn from the 2000-2005 time period, so we might conclude that military leaders are aware of and tend to adopt the best practices reported in extant leadership literatures.

Table 13: Leadership Style Analysis

Case	Case category: mismatched or full	Leadership style	Change of style?
106	Full	Autocratic	-
105	Full	Autocratic	-
82	Full	Transformational	-
31	Full	Transformational	-
8	Full	People oriented	-
13	Full	Transformational	-
14	Full	Poor → transformational	Yes
40	Full	Ineffective → transformational	Yes
53	Full	Ineffective → transformational	Yes
103	Full	Ineffective → transformational	Yes
37	Full	Autocratic → transformational	Yes
57	Full	Ineffective → transformational	Yes
87	Full	Transformational	-
61	Full	Poor → people and task oriented	Yes
15	Full	Ineffective → transformational	Yes
94	Full	Transformational	-
35	Full	Ineffective → autocratic	Yes
64	Full	Transformational	Yes
52	Full	Transformational	-
69	Full	Ineffective → transformational	Yes
97	Full	Ineffective → transformational	Yes
24	Mismatched	Autocratic	-
29	Mismatched	Ineffective	-
7	Mismatched	Ineffective → autocratic	Yes
62	Mismatched	Ineffective	-
85	Mismatched	Autocratic	-
78	Mismatched	Ineffective	-
45	Mismatched	Ineffective	-

Type B Analysis – The transition between barriers and enhancers

The next analytical strategy, labeled Type B Analysis involved a re-examination of the cases in the study to find out more about the turning point of change processes in DOD. The rationale behind this analysis was to explore the transformation of barriers into enhancers that the Type A Analysis uncovered. In the previous section, I described how I examined the evidence, wherein many of the factors transformed from a barrier into an enhancer of the organization's change efforts. In the Type B Analysis, I developed a protocol for auditing the turning point for the overall transitional outcome. Success in this endeavor would help me to answer Research Question #4 and would shed light on any methods the DOD organization staff uses to manage the occurring problems to their advantage.

Once again, in the Type B Analysis, a case-by-case review was conducted to carefully analyze the situation, barriers, and enhancers present. The difference between the Type A and the Type B Analysis was that this time I was primarily looking for the turning point that set the transformation of a variable from a barrier to an enhancer on the right (or wrong) track. When I found this turning point, I carefully documented the method used to implement change, searching for the way the organization used the barriers so that they became the very enhancers making the change efforts more likely to succeed, even though in most cases no evidence of success or failure was offered.

One of the first sources of evidence that led me to the conclusion about a turning point was the realization that the barriers were nearly always described in the cases before there was any mention of the enhancers. Closer examination confirmed this

observation and provided a logical explanation: the cases were uniformly written to describe the sequence of events in chronological order. So, as the organization moved through the change efforts, the employees would first experience the barriers and, likewise, the author would describe these in the first few pages of the case. Then, there was description of the identification of a factor as a barrier along with some type of transformative activity that addressed the barrier and offered a new solution which was successful to the point that the barrier was turned into an enhancer.

In line with this observation, the chronological presentation of each case and my coding scheme allows for the confirmation of the time ordering; for example, if the barrier was successfully converted, then my coding of the factor as an enhancer would only occur in the later pages of the case study. There were also cases where the barrier was not explicitly identified, or the transformative activity did not occur and the change process was significantly slowed or even halted. In these cases, the factor continued to be coded as a barrier throughout the remaining pages of the cases and did not appear later as an enhancer.

In this analysis, it became apparent that this turning point in the change process where a barrier was identified as having such a strong effect on the change process that it must be addressed before any successful change could be made. The identification occurred in different ways. In case 8 we see that there was a barrier in not having performance indicators. So the change process could not proceed until the determined indicators that would signal to them when a misalignment was occurring. Table 14 shows other examples or abbreviated versions of the process of identifying barriers and

transforming them into enhancers. The key words that led me to identify the barriers - (identification-fix) - enhancer method are put in bold font. Also, you will note that the flow of evidence starts in the early pages of the document and after the barrier is identified, something is done and the change process moves forward along with the page numbers.

Table 14: Turning Point Analysis

case	Citation, example
8	"**first** to **establish** that there is a **source of risk in the mis-alignment** between organization structure and processes and the architectural decisions that have been made. **Secondly,** the purpose was to **identify** and verify **low-cost indicators that can be used to identify the occurrences of this misalignment**" p.15 "…intended to **identify early indicators for misalignment**…" p.18 "..we are **identifying early indicators**. Through both types of examples, we are preparing a catalog of misalignments…" p.21
13	"…individual Services **identify the need for** technological and organizational **transformations**. Leaders across the Department of Defense need to personally **address the vital components necessary to implement change** within challenging military environments…" p.13 "…leadership, communication, and cultural change are **critical components that senior leaders must address in order to effectively direct change** " (abstract)
16	"…**identify causes, risk factors, and appropriate interventions**" p.9 "…**identify deficiencies, and apply corrective actions**…" p.18 "…**to identify potential threats and solve problems**…" p.25
21	"…**identify measures of effectiveness applicable to the restoration** of public order in Iraq…." p.6 "…**Attackers** in Iraq **gain access because residents or police fear identifying or reporting patterns of disorder**…" p.13 "In summary, **to control** ……. **must identify those** activities **that disrupt** the movement of **daily**…**activities**…" p. 48
30	"…shrink the management and focus on the task. General Zinni **recognized that the commander needs** only a few staff sections **in order to command and control**…" p.14 "…The Joint Forces Command (JFCOM) also **recognized that the structure below the combatant command should be reevaluated**. They **recommended reviewing** the structure and balance of service headquarters.47…" p.16
106	"…any time you attempt to reorganize, the affected area immediately develops antibodies…" p.25 Challenge: have the people respond to change as a friend, not enemy…
31	"…Today's Joint Staff **recognizes** the warfighting importance of quickly moving successful new technologies and warfighting concepts from experimentation into formal joint doctrine publications that can be adopted across the military. **As a result** the Joint Staff and JFCOM are streamlining the joint doctrine development process to reduce publication cycle time from 46 months to 21 months or less.17…" p.6
28	"…The clear focus was **identifying** near term, **necessary actions to move** the enterprise level, business **transformational process forward** as viewed from senior management and leadership level. The "near term" frame work was viewed as actions that could be realistically initiated within the next two years…" p.3
20	"…**identifying** the lack of an overarching strategic framework to guide U.S. national security policymaking and resource allocation…" p.3 "…the current national security, interagency apparatus was **unable to identify**,…" p.8
14	"One has only to visit Iraq briefly to recognize the complicated operations that require joint interoperability skills by junior officers in charge of small unit missions. These are skills that they must currently learn "on the job" rather than through the schoolhouse leader development process." p. 7
10	"..The process of **identifying a specific problem set** and using a known and proven set of solutions is a logical and a **straightforward leap**,…" p.27 "The challenge and key to efficient and effective problem solving, is to correctly identify the problem, through proper analysis, critical thinking and reasoning in order to look for other ways to solve similar problems and not to rely on only one application to solve all needs." p.40 "…suggested the process of identifying a problem within the Institutional Army and finding the solutions to that problem" p.42 "to identify and eliminate **non value-adding activities** and **streamline other activities**" p. 44

In case 10, you can see an example of how the barrier of non value-added activities was inhibiting the change process and this was turned around when they could shed these activities, making the unit more successful. Even though the solution was logical, as the author notes only by identifying this specific problem set (on page 40) and then custom tailoring solutions based on this identification of the barriers (on page 42) could there be a straightforward leap in efficiency and they could streamline other activities (on page 44). Similar to this example, in Table 15, I display the language of the case that suggested that the turning point was directed at only particular factors, first appearing as a barrier, then after identification and crafting of a solution set being turned into an enhancer:

Table 15: Turning point examples

Case	Factor as a barrier	Factor as an enhancer
15	subordination of individual interest to general interest is the largest obstacle to overcome	develop an atmosphere focused on collaboration and unified purpose
99	one of the critical challenges of executing IW is lack of assessment / warrior's ability to assess effectiveness is limited	situation was improved w/aggressive education / were cross-trained
14	Poor leaders cause domino effect of deteriorating the org & processes; toxic leader = toxic organization	Get rid of toxic leaders; develop & maintain quality leaders; repair basic foundation of leadership
28	lack of integrated, cross enterprise knowledge needed to support & make rapid, accurate decisions	Stove-piped data must be horizontally integrated & shared. / 6-sigma/cont. improvement process, org analysis

Analyzing every case and putting the two sets of examples together, led me to conclude that there is a transformative method that was situational that many of the military leaders use when charged with transforming their units: they attempt to identify the problems, then fix them and then have the benefit of now properly working factor helping in changing other issues. This conclusion is in line with the important role of leadership we saw above when combined with the need for a specific set of solutions

for the identified barrier. In this regard, it supports the literature from chapter two about contingency theory and the value of situational leadership.

During the Type B Analysis, it became more visibly apparent to me that the outcome measure of change efforts was commonly missing from the cases. So, I tried to be keenly aware of any suggested outcomes and, where they did exist, to make sure that they were properly coded. Despite this recursive analytical technique, I was not able to significantly increase the number of cases where the outcome measure of change efforts was identified.

Considering why this was the case, I conclude that you have to take into consideration that usually no overall outcome could have been described. The reason for this conclusion is that the transformation process is still ongoing within the DOD, and the cases described are a part of it. From an organizational change perspective, many of the change efforts are targeted to deep cultural change (Schein, 1992) and so, at the time the case write-up was completed, it would have been far too early for the desired outcomes to be documented or even measurable. The DOD transition has been going on for years, in much lesser format before 2001, and full and more aggressively after September 11, 2001. The change has been taking a long time and may be a never-ending process. Thus, the authors of the cases had less opportunity of describing the transition from the beginning to start, and much more time to describe ongoing transformational efforts in units/brigades.

Such comments still reflect a lot of the overall current change in DOD. Many of the concluding comments in the cases in this research suggested that the transition,

while not complete, was going much better. In a few cases, the opposite was indicated, change efforts were not going well, but they were continuing and no final conclusions about the expected success or failure of the change efforts were offered by the author.

However, some of the described transitions have been completed and serve as evidence from which one can draw preliminary conclusions about the transition process and how it is critical to the overall success or failure of the change efforts that are undertaken. They also contain a few examples of how I found the clues about the turning point of the process.

There are two cases (106, 105) where the outcome of the branch transition was visible: the Secretary of State and General identified overall structure of the Air Force as too big and in need of consolidation and increase of efficiency. The changes were sweeping - from the reorganization of educational and training system through decreasing and consolidating units, firing many people, to implementing cradle-to-grave system for weapons and machinery. Even though the implementation itself was done in very autocratic way leaving highly dissatisfied people, the overall new structure is more efficient and as such is an important piece in transforming the overall DOD.

Another case (c.37) shows a lack of success – the decision-making system in Pentagon has become obsolete, way too complex and anything but rational. However, due to lack of willingness to admit it, and lack of power for single commander to change the entire system it remains the same and there is a huge hold back on progress of DOD transformation.

Case 31 describes the irony of doctrine trying to catch up with the ongoing changes; where the regulations ended up being changed every three days (c.). The unfortunate process has been going on for twenty years, however, lately the lawmakers slowed down and try to give more flexible regulations that would work for a longer time instead of micromanaging every step of the way. The success has been achieved, although it is only partially achieved since there is less reliance on more detailed doctrine and more flexibility for responding to regulations from the changes.

An important finding emerged from the Type B Analysis. In every case, there was a direct relationship between the variables that represented critical barriers and the transformation of these variables into enhancers. If this did not occur, then the change effort was halted until some other turning point event occurred. In all the cases, no other method than this turning point process of identifying and addressing obstacles was observed.

When considering this finding, it is important to note that there are variations in how the turning point was represented and reported. Sometimes the obstacles were identified only by the author of the case, not the actual personnel being described in the document. In other cases, the problems were recognized by people in the organization but were either not addressed, or not properly addressed. Occasionally the obstacles were completely misdiagnosed or simply “mismatched” where some barriers were evident, but the response featured different variables in an attempted solution. In cases where this mismatch occurred, the turning point did not occur until a transformation of one or more of the variables occurred.

The documentation of a turning point in the case where a barrier is transformed into an enhancer is an important finding contributed by this research. None of the cases analyzed had any suggestion that there was a need for barriers to be transformed, nor did any name the process of recognizing and turning around the barriers as a technique necessary to continued implementation of the change efforts. It is safe to state that DOD does not have an officially established/tried method of transformation. None of the cases described a leader or any other person giving instructions to organizational members to distinguish the obstacles and twist them into supporting factors. My conclusions suggesting a "turning point" or "transforming barriers into enhancers" approach to changing organization seems to have been done intuitively within the case rather than by deliberate action. It was only through the structure of the Type B Analysis that I was able to generalize from the empirical observations and offer the inductive conclusions that can enhance theory development and be tested in future research.

Type C Analysis - Quantitative Analysis to Confirm the Findings

Table 11, presented earlier to illustrate the interactive relationship between variables that were barriers and became enhancers, is replicated here and an additional column is presented to portray the results of further quantitative analysis. In Table 16 I have added a new column on the right to denote full, half and half (h-h), and mismatched (m-m) representing the relationship between the number of barriers and the number of enhancers.

Table 16: Type C Analysis of Barriers and Enhancers

case #	Barriers	Enhancers	
7	env, org, str, polt, pr, ldr, org	pr, ldr, comm.	m-m
8	org, str, ldr, pr, sft, ppl, lrn, comm, cult, comp,doct	pr, lrn, str, comm, ldr, ppl, comp	h-h
20	polt, org, env, cult, ppl, ldr	ldr, ppl, env, org, lrn, str, doct, polt	Full
70	doct, str, polt	doct, pr, comm, env, str	Full
68	cult, ppl, org, $	cult, ppl, org, $	Full
82	env, pr, org, ldr, ppl, cult, str, doct	ldr, pr, env, ppl, $, lrn, comm.	h-h
87	str, org, pr, $, ppl, cult, doct, env	str, lrn, ppl, cult, doct, ldr, comm, org, pr, tm, $	Full
61	ppl, cult, pr, env, org, ldr, doct	pr, ppl, cult, ldr, polt	h-h
15	str, doct, ldr, comm, ppl, env	doct, ppl, $, str, comm, ldr, cult	Full
94	lrn, $, ldr, env, doct	env, doct, pr, ldr, lrn, ppl	Full
90	Str, org, polt, $, ldr, doct, comm	Str, comm., org, polt, $, doct	Full

Key: blue font variables are reflected on Barriers and Enhancers lists,
black font variables are those that are not reflected on Barriers and Enhancers list

Env: environment	org: work organization	str: structure
Polt: politics	pr: change process	ldr: leader
Ppl: people	comm: communication	sft: safety
Lrn: learning	cult: culture	comp: computers, software
Doct: doctrine	$: money, resources	
m-m: mismatched cases	h-h: half and half cases	full: full cases

The discovery of the turning point where barriers were transformed into enhancers sparked many more numerical comparisons and forms the basis for the Type C Analysis. In this stage of the research, the numerical comparisons were performed in order to confirm the possible relations and patterns that emerged inductively from case-by-case comparisons. In reading the results of the Type C Analysis, it is essential to keep in mind, that this meta-analysis is a secondary analysis of case studies, employing

primarily qualitative coding and analytical techniques; hence the results presented here do not allow one to state whether or not a finding is statistically significant. Instead, this form of meta-analysis allows only suggestive conclusions, often serving as a base for future detailed investigation.

To conduct the quantitative analyses in the Type C analysis, I started by systematically comparing the variables that were listed as barriers with those listed as enhancers seeking to determine the level of duplication (see Table 6) within a case and then comparing this result across all cases. Where there was little duplication of variables, I purposefully revisited the case to assure that the coding was accurate. Then, I considered the unique facts surrounding the case and the change efforts to see if an explanation for the absence of the overlap could be determined. Or, if there were no unique circumstances, then I wanted to determine if there was any conclusion that the change efforts were not successful or that they had been stalled at the time the case report was written.

Case #7 is an example of a case with little duplication between the barriers and the enhancers. In case #7 only the change process and leader variables are transformed into enhancers. The problems coming from the environment, structure, work organization and people are not taken care of and addressed only by using communication as a help but not leading to a turning point towards success. Possible explanations for this may be due to inaccurate identification of the obstacles or incorrectly chosen enhancers that were unrelated to the problem remedy. We may illustrate it as:

Different kinds of obstacles that could be represented as A, B, C, D, E, F, or G are treated with different strategies that can be represented as E –related strategy, F-related strategy, and a Z-related strategy. The E and F strategies are matched to the problems of E and F (they are now enhancers), but the Z-related strategy does not effectively address the remaining obstacles of A, B, C, D and G.

Cases that exhibited a similar pattern were categorized by the researcher as "mismatched," signaling that a majority of the barriers are not reflected on the enhancers list. Overall, in the 76 cases examined, the mismatched ("m-m" code in the Table 16) cases made up 10.5% of all cases.

In several of the cases, (14.5%) approximately one-half of the barriers were also reflected on the enhancers list. These cases were categorized as "half & half" ("h-h" code) cases and the results may have been due to the organization not recognizing all the obstacles, or having an inability to change some of the obstacles into enhancers, or addressing only some of the problems. I found this to be the conclusion in cases 8, 82 and 61.

The remaining 75% of the cases were categorized as "fully reflecting" (labeled full) since a majority of the barriers are the same as enhancers suggesting the correct recognition of the obstacles to the change efforts and a turning point where the barriers were transformed into enhancers that addressed a vast majority of the obstacles to the change efforts. These cases may have had one or two extra barriers that were not resolved (as in cases #15 and 90), but they were clearly a vast minority with most of the fully reflecting cases achieving nearly perfect duplication of variables.

To summarize, 75% of the cases were fully reflecting, where a majority of the barriers were transformed into enhancers after some turning point was reached in the case. Nearly 15% of the cases were categorized as half-and-half cases since some, but not all of the barriers were transformed into enhancers. The remaining 10.5% of cases exhibited a mismatch between barriers and enhancers. These numbers support the conclusions reported from the Type A and Type B Analyses, suggesting that a practice of identifying barriers and finding a way to transform them into enhancers may be an important turning point in change efforts and a valuable method for approaching organizational change in the DOD organizations.

Another form of investigation completed during the Type B Analysis was deliberate re-coding and testing to detect possible relationships between some of the most important independent variables (as measured by the frequency and magnitude of the variable during the coding as well as the presence of the variable as a major factor in the barrier/enhancer analysis reported above.

The first bivariate relationship upon which I conducted Type C Analysis was between the LEADER and PEOPLE variables. Both of these variables were frequently coded in the case studies (as reported in Chapter Five), each variable surfaced as a main factor in the relationship between barriers and enhancers, very often seen together in the cases. In addition, this was an important relationship to study to answer research question #2 since it would isolate the leader's action and the impact on the change efforts that were being undertaken. I started this analysis with the intention of answering this question: "Can one assume that once a leader becomes a problem/enhancer people

will “automatically” become a barrier/enhancer?” To conduct this analysis, the same “main-table format” was used to count how many cases had the variables leader and people together as a barrier or as an enhancer. Then I would determine how many cases had only one of them listed as a barrier or enhancer and finally would consider when the variable was absent.

Table 17: The Leader and People Variables

Variables:	LEADER % OF CASES	PEOPLE % OF CASES
BOTH FACTORS as a BARRIER	57%	
BOTH FACTORS as a ENHANCER	61%	
BOTH FACTORS absent	7%	
Variable as a BARRIER	70%	72%
Variable as an ENHANCER	73%	72%
Variable as BOTH BARRIER and ENHANCER	59%	65%
Variable absent	13%	16%
Variable as a BARRIER only	15%	9%
Variable as an ENHANCER only	15%	11%

What conclusions can be drawn from Table 17? First, 73% of the cases had the leader as an enhancer and 72% of the cases had the people variable as an enhancer to the change efforts, which makes them both as the most important positively influencing change factor. Second, in 70% and 72% of the cases, respectively, the leader and people variables were barriers to the change efforts and the transformation was unlikely to occur. Both of these factors are highly important barriers in the change efforts (right after the change process as reported in Table 6). A third conclusion we can draw from the table is that in 59% and 65% of the cases, the leader and the people variable turned

from being a barrier to being an enhancement. These results suggest that both of the variables have a high potential of being transformed from a barrier into an enhancer although it may be slightly easier to transform the people variable than it would be to transform the leader variable.

There were other surprising findings in this table, in particular those findings where there was no mention of or differences between the two variables. It is important to note that 13% of the cases did not mention leader (16% of the cases did not mention people) as either a barrier or an enhancer. In 14% of the cases the leader variable (and in 12% of the cases people) was an enhancement to the change efforts, even though it was not identified as a barrier to the process. Finally, in 14% of the cases leader (in 9% of the cases people) remained being a barrier to the process. Which means the leader is a bit more likely to become an obstacle than people, and then more difficult to convert to an enhancer.

There were some cases where the evidence suggests that a turning point was not reached, despite high levels of concurrence with either the enhancer or the barrier variables. In 61% of the cases, people and leader together were an enhancement to the process and in 57% of the cases the people and leader variables together were a barrier to the change. These data may suggest a possible one-way (either positive or negative) relationship between the two factors that would limit the likelihood of a turning point and transformation process, although the relationships were not as strong as previously assumed. For example, if a leader is pro-change, then the people he leads will more than likely be pro-change as well (the leader will expect them to be pro-change, motivate

them and check on their pro-change performance), if a leader is anti-change, the followers will more than likely exhibit similar anti-change attitudes and behaviors.

The data in Table 17 allow concluding that the variables for Leader and People are both very important factors in the change process, each having equal potential to becoming either a barrier or an enhancer to the transition process. Therefore, it is very important to lay down an appropriate foundation for the leader and people to cooperate during change efforts so they do reach the turning point and become an enhancer early in the change efforts. Since in the majority of cases both the leader and the people variables turned from being a barrier into being an enhancer to the change process, thus hopeful conclusion can be offered. It seems reasonable to suggest that usually leader and people are “turn - able” factors, with a lot of potential for transformation from a barrier to the enhancer. Finally, in a small percentage of cases people and leader remained being a barrier to the process; which is a very good news suggesting that most of the time this barrier is overcome with a transformative solution.

The one overall conclusion that I would offer from this Type C Analysis is that when a leader is a barrier/enhancer, the people are likely to follow as a barrier/enhancer as well. With 57% as a barrier and 61% as an enhancer respectively, I feel confident saying that a majority of the cases support this statement. However, I do acknowledge that this “majority” is close to “half” of the cases. Keeping in mind that meta-analysis does not allow me to name any relation as significant and does not give an option of specifying significance bracket; it is still safe to suggest that future research that was strictly to deductively test this association would be worth the effort.

Since there were several cases that did not reflect the significance of the leader or the people variables, my analysis turned to an exploration of what variables would be significant in understanding the relationship of barrier and enhancers. I conducted a targeted analysis of three combinations of independent variables: the leader and the change process, structure and communication, and culture and communication. The role of leader and people has been widely described in the academic literature, and it seems to be very similar in the DOD. However, considering that leadership is #1 barrier and # 3 enhancer and that change process is the #1 enhancer and # 4 barrier, I next attempted to see if numerical analysis would deliver additional explanation about tentative findings.

Similarly, an attempt was made to analyze factors that are usually very difficult to change: culture and structure as well as their impact on communication, which traditionally is shaped by these factors.

The results from each of these additional analyses are presented next.

1. LEADER and CHANGE PROCESS Comparison:

Considering that a leader is the main barrier and process of change is the main enhancer, can we identify which factor is more important? An examination identical to that described for the leader and people variables was carried out and is reported in Table 18.

Table 18: The Leader and Change Process Variables

Variables	CHANGE PROCESS % OF CASES	LEADER % OF CASES
BOTH FACTORS as a Barrier generally	46%	
BOTH FACTORS as an Enhancer generally	62%	
Absent	13%	13%
Variable as a Barrier	63%	73%
Variable as an Enhancement	78%	70%
Variable as a Barrier + Enhancement	56%	59%
Variable as a Barrier only	7 %	14 %
Variable as an Enhancement only	24%	14%

In this analysis, I was trying to extract the possible connections between the two factors, but it does not reveal too much at this point. Some tentative conclusions that provide a basis for future research are as follows:

- Interestingly, the variables for leader and change process were absent in exactly the same number of cases (13%), but these cases are not mutually exclusive, they are overlapping.

- The leader variable is a bit more likely to become a barrier to the transition (73%) than the change process variable (63%); however, both have a very high potential of becoming one. On the other hand, change process variable is more often coded as an enhancer (78%) than is the leader variable (70%). Nevertheless, both of them are very important enhancers in the vast majority of cases.

- The change process was identified as a barrier and converted into an enhancer in 57% cases, similar to results for the leader variable (59%). However, the

change process remained strictly as a barrier in 7% of the cases, while leader was a barrier in twice as many cases (14%). Still both variables had few occurrences, making an interesting revelation, implying that both forces have a high potential for being converted into an enhancer.

To summarize the results from this analysis, there is good news. The variables for change process and leader together are more likely to be an enhancer to the transition (62%), than a barrier (46%); and they do show high potential of teaming up together in one direction (in 62% both factors had a positive relationship and in 46% both had a negative relationship). Also appealing is the conclusion that the change process is more often an enhancer (78%) than a leader is (70%). Even though the difference is small, it may suggest that occasionally someone else than the leader (people, doctrine or politician) may influence the way transformation is being implemented. Overall, the differences and similarities are too small to be able to determine which factor is the main force of the transition processes in DOD.

2. STRUCTURE and COMMUNICATION Comparison:

Traditionally organizational structure does influence communication channels and habits. To confirm the relationship in these cases, I asked the question: were these variables surfacing together in the DOD change efforts?

Table 19: The Structure and Communication Variables

Variables	STRUCTURE % OF THE CASES	COMMUNICATION % OF THE CASES
BOTH FACTORS as a Barrier generally	29%	
BOTH FACTORS as a Enhancer generally	29%	
Variable absent	30%	31%
Variable as a Barrier generally	54%	42 %
Variable as an Enhancement generally	45 %	55%
Variable as a Barrier+ Enhancement	38%	33%
Variable as a Barrier only	22%	8%
Variable as an Enhancement only	10%	22%

Looking at this bivariate relationship, we can draw the following tentative conclusions:

- Structure and Communication were not identified as a factor in 30% of the cases, which is a big percentage, especially for a public sector, where structure is traditionally considered a problem to any progress and the least flexible factor. Therefore one can consider it an unexpected and "positive" percentage. Due to its nature, structure still did occur as a barrier in 54% of the cases. However, it remained as an obstacle in only 22% of cases, which is another surprising number; and was converted to an enhancer in 38% cases. Those numbers indicate that structure, at least in DOD is more flexible, and more shapeable than commonly thought.

- Communication on the other hand was an enhancement in 55% of the cases, and a barrier in 42%. It is a big consideration. It was turned around into enhancement in only 33% of the cases, which is surprising, considering that communication should be much more flexible than structure (note: structure was

converted into enhancer in more cases 38 %). On the other hand, communication remained as a barrier in only 8% of the cases, whereas structure in over 22%. Overall, the numbers would suggest that communication has a huge potential of being an enhancer (55%), but once it poses problems, it may be a bit difficult to change it over to being an advantage (only 33%).

- The two factors together as a barrier or an enhancer are found in 29% of cases, which suggest the relationship between them is weak. This is also astonishing, since structure often influences communication channels.

Communication seems to be free from the influence of structure, at least during the change process, and as such, was widely used as an enhancer (55% cases). It is a very positive and surprising fact, that a regulated and complex public organization can easily adjust communication to its needs.

3. CULTURE and COMMUNICATION Comparison:

Organizational cultural traditionally shapes communication patterns and channels as well. Were these two factors tied together in the DOD change?

Table 20: The Culture and Communication Variables

Variables	CULTURE % OF THE CASES	COMMUNICATION % OF THE CASES
BOTH FACTORS as a Barrier generally	24%	
BOTH FACTORS as a Enhancer generally	21%	
Variable absent	31%	31%
Variable as a Barrier generally	55%	42%
Variable as an Enhancement generally	37%	55%
Variable as a Barrier+ Enhancement	26%	33%
Variable as a Barrier only	27%	8%
Variable as an Enhancement only	10%	22%

Looking at this bivariate relationship we can draw the following tentative conclusions:

- Here, we have even more surprising numbers. In over 30% of the cases neither variable was identified as factors in the transition. That is unexpected knowing that these factors are influential. On the other hand, it could be seen as a very good sign, since in over 30% of the cases these important variables did not create a variable to change. Another surprise finding was that these factors occurred together as a barrier or together as an enhancement in only 20% of the cases; one could expect stronger relationship between them since they tend to be closely related, usually communication changes due to culture changes and vice versa.

- Culture was recognized as an enhancement in almost 37% cases, which is not too bad considering it is a public sector organization; while communication is an enhancement in 55%. One can turn these numbers around and we find culture as a barrier in 55% of the cases and communication in 42%. Out of these cases, culture

remained as a barrier in over 27%, while communication only in 8%, which suggests its good “turn-around” rate.

- This analysis brings identical conclusion as the previous one: communication seems to be free from the influence of culture at least during the change process in DOD. In spite of traditionally following the regulations of how to communicate, the DOD officers were able to use to their advantage.

- Flexibility of communication factor in as heavily regulated institution as DOD, allows to assume that it should be even easier to shape factor in civilian organizations.

Exploring Barriers that were not turned into Enhancers

From the results provided above, the phenomenon of barriers that were not transformed into enhancers came more sharply into focus. I decided to explore this more in-depth by determining the number of barriers that were not transformed for each of the cases. From Table 21, you can see that nearly a quarter of the cases had one barrier that was not eventually transformed into an enhancer. In fact, more than one-half of all the 62 cases with “leftover” or unresolved barriers had only one or two variables coded as representing a barrier to the change efforts that did not pass through a turning point. However, there were a few cases with many barriers leftover, suggesting that the turning point and transformation process would be difficult to achieve. Although it is important to note that each of the barriers has the potential to be transformed, so perhaps the organization has more options it terms of what action might represent a turning point as their change efforts continue.

Table 21: Barriers present across the cases analyzed

CASES WITH		Percentage of all 76 cases
w/ 1 Barrier Leftover	16	21%
w/ 2 Barriers Leftover	20	26%
w/ 3 Barriers Leftover	14	18%
w / 4 Barriers Leftover	9	12%
w/ 5 Barriers Leftover	1	1%
w/ 6 Barriers Leftover	1	1%
w/7 Barriers Leftover	1	1%

To further explore the results suggested by the analysis reported in Table 21, I next inspected the variables that tended to remain as barriers to see what patterns could be discerned. Sixty-two cases had at least one barrier not transformed into an enhancer. This is probably due to being the most difficult to change or not considered a barrier.

Table 22: Extra Barriers by Variable Name

Variable	number of cases the variable was an extra barrier
ENVIRONMENT	22
WORK ORGANIZATION	21
CULTURE	21
STRUCTURE	16
DOCTRINE	14
POLITICS	13
LEADER	10
PROCESS OF CHANGE	7
COMMUNICATION	5
MONEY / RESOURCES	5
PEOPLE	3
PLANNING	1
LEARNING	1
AUTHORITY / COMMAND, CONTROL	1

Out of those variables that had an extra barrier/s not turned around into enhancer, the environment was the most common one, followed by work organization and culture. The extra barriers remained as such either because they may have been not recognized as a barrier, or proved to be too difficult to change.

Exploring the Extra Enhancers

There were also 64 cases that had additional enhancers that were never a barrier in their situation. These additional enhancers were counted in order to look at their interrelationships. Similarly, all the extra enhancers were looked at (64 cases had extra enhancers):

Table 23: Extra enhancers evident across the cases analyzed

Enhancer	SUM
LRNLEARNING	23
PROCESS OF CHANGE	18
COMMUNICATION	18
DOCTRINE	15
ENVIRONMENT	12
JOINT WORK/UNITY OF EFFORT	12
LEADER	11
MONEY / RESOURCES	10
CULTURE	9
POLITICS	9
PEOPLE	8
STRUCTURE	8
ORGANIZATION	7

From the above one can see that learning factor was used most commonly as an additional enhancer to the change process. The factors that were seldom serving as supplemental enhancers are better time management, better work organization, structure, and people. I also looked at the cases trying to see how many cases had more than one supplemental enhancer:

Table 24: Extra Enhancers by Variable Name

Cases with		Percentage of all 76 cases
1 extra enhancer	20	26%
2 extra enhancers	16	21%
3 extra enhancers	17	22%
4 extra enhancers	7	9%
5 extra enhancers	4	5%

If the DOD personnel managed to come up with extra enhancers to the process, usually only one supportive factor was used to overcome any barriers. The interpretation of enhancers is a bit different from that of the barriers: there is nothing wrong with having extra enhancers to the transition process, as long as all (or at least the vast majority of) the barriers are taken care of. The same thought from the other perspective: there is no point of using all kinds of supplemental supportive factors, when the obstacles hindering transformation are being ignored. That may suggest that leaders/staff trying to apply "out of the box" / innovative methods to their situations.

Overall one initial conclusion to draw from this data is that it seems to point out to the fact that ONCE the barriers endured during change processes in DOD were identified, there were attempts to eliminate them, which very often made them enhancers to the transition. However, case authors seldom referred to the overall change outcome, because the process has been ongoing and very seldom was it officially considered to be completed. The authors concentrated more on the description and details of change efforts in DOD, than on the overall outcome.

While supplemental enhancers suggest the staff/leaders efforts to apply innovative methods to help with the process, some of the extra barriers suggest possible change outcome for DOD. The most important one seems to be partial transformation: only some units are transformed as seen in cases 46, 58, 83, 97 and 102. Whether it is a success or failure of change is difficult to estimate now. On one hand, the DOD is cautious and does not want to put the entire DOD organization through change, when it is not certain how to achieve this change (in case of failure only some units fail). But,

on the other hand, when doing it this way the transformation may be exceedingly prolonged. In the meantime, this approach may cause some friction if transformed units are incompatible with those not yet transformed.

To summarize the results from the different forms of analysis:

Type A Analysis – content analysis allowed me pinpoint the factors (barriers and enhancers) that play a role in DOD change, initiating a finding of the relationship between the barriers and enhancers,

Type B Analysis – content analysis led to identifying a turning point of the change processes/method of turning the barriers into enhancers and therefore conforming relationship between the barriers and enhancers, and

Type C Analysis – quantitative; was attempted to detect relationships between some factors and patterns (extra barriers and enhancers).

Upon completion of these three types of analysis, it is possible to offer preliminary findings related to the research questions. Considering all the factors that turned out to play a role in the DOD change processes, one can initially answer research question #1 stating that the key factors identified by the literature are very similar to those found in my analysis of change efforts in DOD organizations.

Research question #2 sought to confirm the special role of the organization leader in the change efforts. From this analysis, the leader factor turned out to be the number one barrier and number three enhancer to change, suggesting that the leader is indeed a very influential factor in the DOD transformation. Leaders do play a very

similar role in the DOD, just as the leaders play in the civilian world. That initial conclusion provides a positive preliminary answer to research question #2.

Turning to research question #3, even though there were 24 new variables identified in the case coding and analysis, such as environment, joint effort and politics, they seem to represent variables already known to scholars and present in theories as influencing change processes in the civilian world. With this conclusion, we may also initially answer research question #3, stating that there are no variables not previously identified in the literature that play a role in DOD change processes. These findings and what they mean in terms of the scholarly literature are discussed more in-depth in Chapter Seven.

Chapter Seven: Discussion and Conclusions

The primary purpose of this research was to examine change efforts in DOD organizations to determine if extant literature had sufficient explanatory power for this set of cases reviewed as part of the meta-analysis. Given the unique mission of the organization and the episodic stressors it faces when called upon to protect the nation, it seems reasonable to increase our understanding of how these organization's change efforts as similar to, as well as different from, other organizations across all sectors. To accomplish this purpose, the research was guided by four questions:

Research Question #1: Are the factors commonly identified in the organization change and leadership literature as important in influencing organization change efforts equally relevant to DOD organizations?

Research Question #2: What is the position of the leader factor in DOD change?

Research Question #3: Are there factors specific to DOD organizations that influence organization change efforts that are not identified in studies of "regular" public/private companies?

Research Question #4: What are the causal relationships between factors that influence DOD organization change efforts?

In the final chapter, evidence from the analysis is drawn to answer the research questions and to offer conclusions about change efforts in the DOD organizations. It is also considered how well these efforts align with extant literature. Then, a preliminary causal model is presented to illustrate relationships between the variables that were

analyzed and the outcomes of the change efforts.

The primary contribution of this model is the discussion of the barriers and enhancers that interact with the independent variables to transform the change process. Where the barriers are successfully transformed, the change efforts gain momentum and continue on a trajectory suggesting that success will be achieved. There is also strong evidence from this analysis; however, that few outcome measures of success or failure are documented. As a result, any conclusions from this analysis must be considered tentative until more rigorous deductive testing can occur.

The chapter closes with a return to the theoretical literature to elaborate the contribution of this research. The causal model uncovers new variables that seem to play a critical role in the success or failure of an organization's change efforts. Where there is evidence of a lack of alignment with the literature we consider why this may be so and make recommendations for how to further develop our knowledge.

Answers for each Research Question

Research Question #1: Are the factors commonly identified in the organization change and leadership literature as important in influencing organization change efforts equally relevant to DOD organizations?

Extant literature yielded eight variables to originally guide this meta-analysis of 76 published cases document change efforts in DOD organizations. Of these variables, seven were considered to have a causal relationship with the dependent variable (an outcome measure of the change effort). Of the original seven independent variables, the

reason for the change efforts was not sufficiently documented in the cases studied and so it was dropped from further analysis. If I were to speculate on this omission in the cases, I would remind the reader that the authors were, to a large extent, high level leaders in the DOD organizations. So, a very simple explanation is that they may have understood the audience for their work to be other DOD-involved persons and that explaining the change efforts would provide redundant information to other organizational insiders.

An alternate explanation for this oversight may that that their unique high-level organizational position suggests that they think they are the ones responsible for the change efforts and, since it was their idea, there would be no other reasons for change to document.

A third explanation may lie in the very dynamic operations environment the military has experienced since the time of the cases (early 2000s) where the operations tempo has been high and the organization is evolving to feature more collaborative efforts to stretch strained resources. In addition, this is a period of evolution for the DOD as a whole with changes in the heuristic of how the military accomplishes their mission due to small scale, isolated, military engagements with "non-traditional combatants that rely more on technology and light weaponry and highly mobile responsiveness than the traditional on the ground geographic space control model of the "world war" scale military. While we are unable to draw any conclusions about the veracity of these alternative explanations, the fact remains that the reason for change was not sufficiently documented and coded in these cases to make the variable

sufficient for analysis.

Turning to the remaining six independent variables, the variables for leader and people were the most prominent of those deductively tested and were also the most frequent when considering the entire set of independent variables (n=24) including those that were inductively identified. The leader and people variables had nearly an even number of mentions as barriers and as enhancers to organization change efforts. Communication, structure and culture were variables that had a moderate number of mentions in the 76 cases studied. Communication tended to be more of an enhancer than it was a barrier; while structure and culture were more frequently coded as barriers. The last variable, planning, had few mentions across the cases, but the majority of these were as enhancers to the change process.

The outcome measure of the change efforts can be perceived as only representing a partial transformation. Only five cases (46, 58, 83, 97, 102) mention the change outcome from the perspective of entire DOD sector. These cases point to it as a barrier to the ongoing sub-changes, since some units operate in the old-system and some in the new one, becoming incompatible. One may speculate that the DOD probably did not want to change all the branches and their units at the same time, due to fear of failure, and proceeded with only some of them being changed. The decision of which brigade/unit would be changed was seldom explained by the case authors. From this, it seems that ultimately DOD is still in the process of changing and considering the past progress of transition, it will be there for quite many years. From this point of view, it is difficult to assess the overall change outcome.

So, to answer Research Question #1, of the seven independent variables most often cited in the literature as being important to organizational change efforts, the deductive testing shows that leader and people as certainly important in military settings and their presence can detract from or contribute to change efforts with nearly equal frequency. Attending to the communications inside the military organization is important as well and it can often contribute to change effort success. The culture and structure of the organization seem to be important areas to pay particular attention in military as well as other organizations. The only area where there seems to be a difference between our current understanding of change efforts inside organizations is in the reason for why the change occurs; however, since this was not documented, there is no reason to conclude that the deductively tested variables are not equally applicable to military settings. Future research may confirm this conclusion.

Research Question #2: What is the position of the leader factor in DOD change?

The military is an organization that has historically placed strong emphasis on the selection and training of its members to make them strong leaders within and outside of the organization. This is suggested by mottos used in military recruitment materials such as join the Army to “Be all that you can be” and in the Marines slogan “Leader, Champion, Marine.” Certainly existing literature exalts the importance of the leader in change efforts, but it often suggests that transformative leaders in organizations with more organic processes and flattened structures can be keystone factors. The military has a history of preference for mechanistic processes and command and control hierarchical structures. Would this mean their role in change

efforts was different from other organizations? That is the puzzle that prompted Research Question #2.

To answer this question, the dual occurrence of the leader with the other independent variables was studied. This analysis concluded that the leader is the biggest barrier (73%) in DOD change processes and the third enhancer (70%) to it. That suggests that this variable has enormous influence on DOD processes. In spite of many operations and processes being heavily regulated, DOD leaders still have to and often do exercise their power over the units' performance. The same proves to be the case during transformation efforts. In particular, the relationship between the leader and the people in the organization was critical: both factors together present in over 93% of the cases, more or less consciously teaming up very often in the same direction: either positive or negative in regards to change. And, as was determined in Chapter Six, the leader and people combination was both a barrier and an enhancer in 59 of 76 cases and was absent from only seven cases overall (less than 10%).

Micro level analysis of the leader and change process also underscored how the leader could be the lynchpin in change efforts with 56 of 76 cases showing a cross-occurrence of these two variables and no mentions in only 12 of 76 cases. Further, where the cross-occurrences appear, it is more likely that they will be the turning point in the change efforts transforming barriers into enhancers that improve the likelihood of success.

Is this evidence enough to conclude that leaders in DOD organizations play a key role in change efforts? Surely, one may agree that there must be an affirmative

response to this question. The more important question, “is the leaders’ role in change efforts that are different in DOD organizations, cannot be answered from this research since the counterfactual is not equivalently documented in other scholarly works. This represents an area for future exploration.

Research Question #3: Are there factors specific to DOD organizations that influence organization change efforts not identified in studies of public organizations and private sector companies?

The availability of a large repository of scholarly and professional studies provided a unique opportunity to perform a meta-analysis on these works to assess the degree to which change efforts in the military are similar to or different from those more commonly written about in the private and public sectors. Not only could we compare by sector, but there was also the opportunity to examine an organization that has operated in a very tumultuous environment where the historical mission of the organization was being questioned or challenged as the nature of domestic and international security efforts changed.

To answer this research question, the analysis was started by deductively coding eight variables and inductively identifying and coding an additional 16 variables. At the conclusion of the first round of coding, there was insufficient magnitude of influence for eight variables and they were dropped from further analysis. Then, a pool of nine variables inductively derived remained and could potentially be unique to the DOD change efforts. Of these, three had a relatively high frequency within the dataset [change process, work organization, and doctrine]; two had a moderate frequency

[environments and joint work/unity of effort]; the remaining four appeared in low frequency [authority/command and control, money/resources, learning and politics]. The surprising finding that emerged from this list of variables that change process, doctrine, joint work and learning were important enhancers with the first three appearing among the most frequently as enhancer of all 16 variables analyzed within the entire dataset. The inductively derived variables of environment and politics were often barriers, but they were not among the top four of all 16 studied and had relatively low frequencies within the data.

So, clearly a majority of these variables was important, but were they unique to the DOD setting? Few would argue that the environment, politics and money/resources are of more concern to the military than to other public organizations and many scholars have characterized these concerns as issues that make public organizations different from private organizations. In a similar vein, one would be hard pressed to argue that work organization, change process and learning are sector unique given the great amount of attention they receive in the vast bodies of literature on organizational change, organizational development and leadership. Certainly military doctrine has few equivalent applications across the sectors. However, within the cases there was a prevailing sense that leaders and people have often struggled due to the regulations, and it took much longer for them to obtain an authorization, find a way around the policies, or even change the law to carry out what needed to be done. Keeping in mind the military "order-done, no matter how odd" mentality hardly ever was reflected in the transformation process. The "do" part – "transform" was ordered, but there were no specific orders for how to carry the order out. That left the leaders with quite a lot of

freedom and their own initiative. Under the pressure of carry out the orders and not too many known transition methods aligned with regulations, majority of the officers turned to correcting what was the problem. So, they did carry the order out, but along the way they managed to put enough pressure to change a lot of policies in order to be able to transform. The military doctrine usually is top-down, but this time it changed a lot due to the pressure from the lower echelons, which is quite unique for the military. Not many organizations, especially in private sector experience such an influence and struggle with doctrine. We have to keep in mind however, that national defense is much better off being regulated and controlled than left to the free will, perception and spontaneity of the leaders.

Another variable that you would expect to be military specific, or unique within this meta-analysis was the joint-work/ unity of effort variable given the strong emphasis is has received in terms of forcing cooperative activities between the military branches. The variable for joint-work/unity of effort represents a new operational philosophy for the branches of the military, so it was an important factor that few other organizations would have experienced in the same perspective as was traditional in the silos of the military branches did. It was a challenge considering the traditional rivalry between the branches, which now had to come together and on top of learning to cooperate with each other. Many private organizations also struggle with the lack of unity of effort, but in different perspective (mergers and hostile takeovers). Finally, few would challenge the nearly universal expectation of adherence to the authority/command and control structure of DOD organizations, making a conclusion that this is a unique variable, although still one that was well managed and overcome by the DOD staff.

Reviewing the inductively identified variables, the frequency for which they appear in the cases and the role they play as barriers or enhancers in the transformation process, we have to draw a negative conclusion on Research Question #3. Certainly, the variables of doctrine, joint work and authority/command and control structures (or their private/public sector equivalents) have been discussed among organizational change and leadership scholars. Although not one unusual/new factor was identified in DOD change efforts, the importance of these factors as enhancers that can increase the likelihood of change success appears to have been understated.

Therefore, "constraints may be tougher" (in public sector organizations and in the DOD specifically) "but they are not that tough" (Golembiewski, 1985 as cited in Rainey, 2009, p.404). The point is what seems to be at the very core of the DOD, such as the perception that members must blindly follow orders and strictly obey regulations, were brought up as issues and changed according to the need. Such is a huge success of military officers, laying a much better foundation for easier transformation in the years to come.

Research Question #4: What are the causal relationships between factors that influence DOD organization change efforts?

The research results provide the most definitive answer to this research question. This is gratifying since they also offer the highest probability of furthering our theoretical understandings of causal relationships in change efforts, irrespective of the sector of the organization. From the research, we can conclude that the most important variables influencing organizational change in the DOD are:

1. Leadership / people / work organization / process of carrying out change - as barriers.

2. Process of carrying out change / people / leadership / doctrine - as enhancers.

Further, the identification of a simultaneous effect of the appearance of barriers and/or enhancers with other independent variables is not documented in the literature. This is an important gap since when an organization encounters a barrier the change efforts will be stalled, unless the organization reaches a turning point where the barrier is transformed into an enhancer. The cases suggest that there is a method of managing organizational change in the DOD that we are not aware of based on published scholarly works. Of course, it is possible that the DOD method of turning change barriers into change enhancers may be described as a method that many use, but when doing so they are not aware of nor document their logical proceeding. Or, perhaps, this turning point is otherwise categorized as a technique to handle transition.

Assuming that this turning point in the DOD change efforts is, in reality, a key transformative element influencing its progress toward change success, we find that the turning point is often achieved through the correct diagnosis and treatment of identified problems. If the organization does not recognize a barrier to the change efforts that has arisen and then purposefully craft a strategy that leverages an existing enhancer then the change efforts are stalled in most of the cases studied.

From this research, I have identified important interactive relationships that exist between several deductively and inductively identified factors. The cross-occurrence of

these variables seems to influence the DOD transformational processes in a majority of the cases studied. The most common cross-occurrence is between leader and people, where I find that the variables for leader and people seem to follow each other in either a positive (enhancer) or a negative (barrier) direction. That is to say that both of the factors have equal potential to becoming either a barrier or an enhancer to the transition process; therefore it is very important to lay down an appropriate foundation for leader and people so they are enhancers to the transformation from the very beginning.

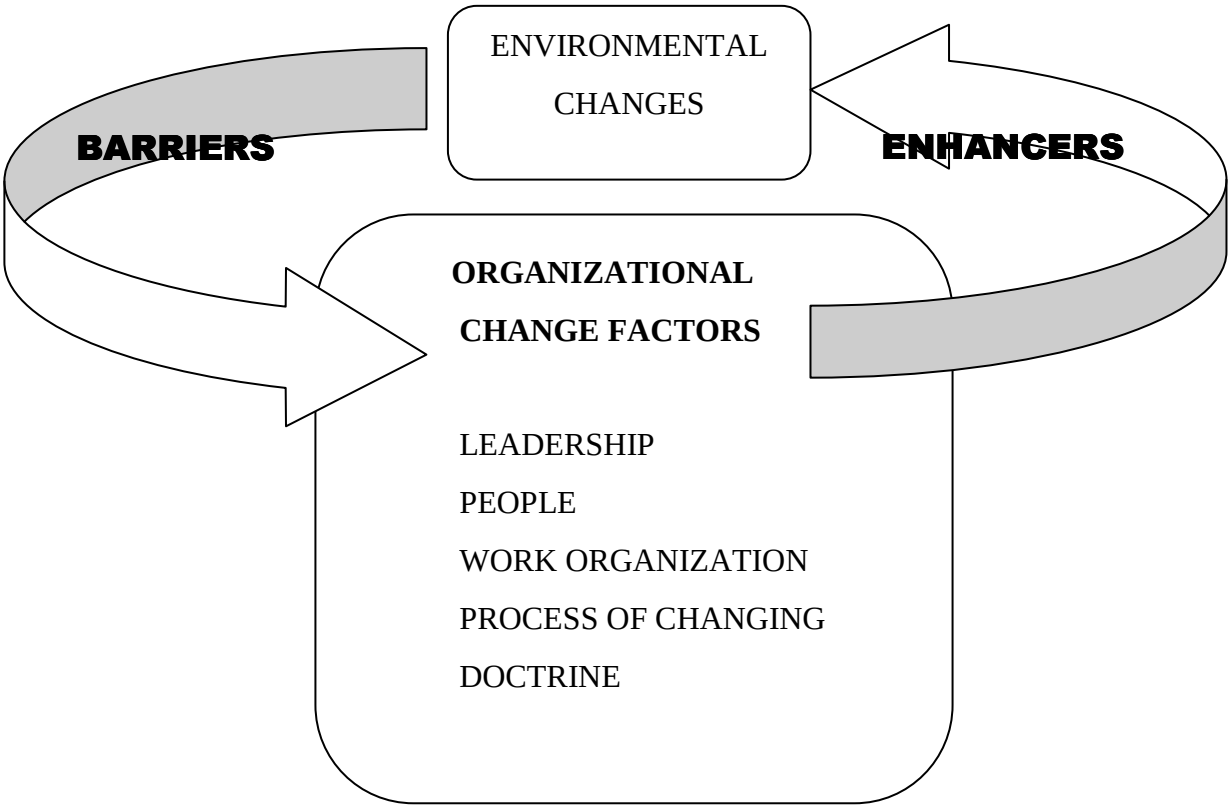
On the other hand, considering the weak link between communication (an extra enhancer) and the structure/culture factors (most often in the form of leftover barriers) in the DOD turning-point transformation process, one can argue that communication is the most flexible factors of all three and apparently can be easily adjusted on as needed basis. When an organization is forming, the structure and culture as set by the original leaders and gradually evolve as members enter and leave the organization based on the strength of the acculturation and cultural norming process. If they are sufficiently strong, one can expect these two factors to heavily influence communication patterns. However, during a change process the influence of these two factors may diminish to the point that they can be overcome when communication enhances the need for and anticipated benefits of change efforts.

In addition, other variables that were strong barriers such as the environment and politics affected the organizations in this study can cause a great deal of discord and disharmony between organization and its environment and other stakeholders. Identifying the elements of dissonance (which may be factors of organizational change),

one can reshape them, so they help align the organization with the new situational imperatives.

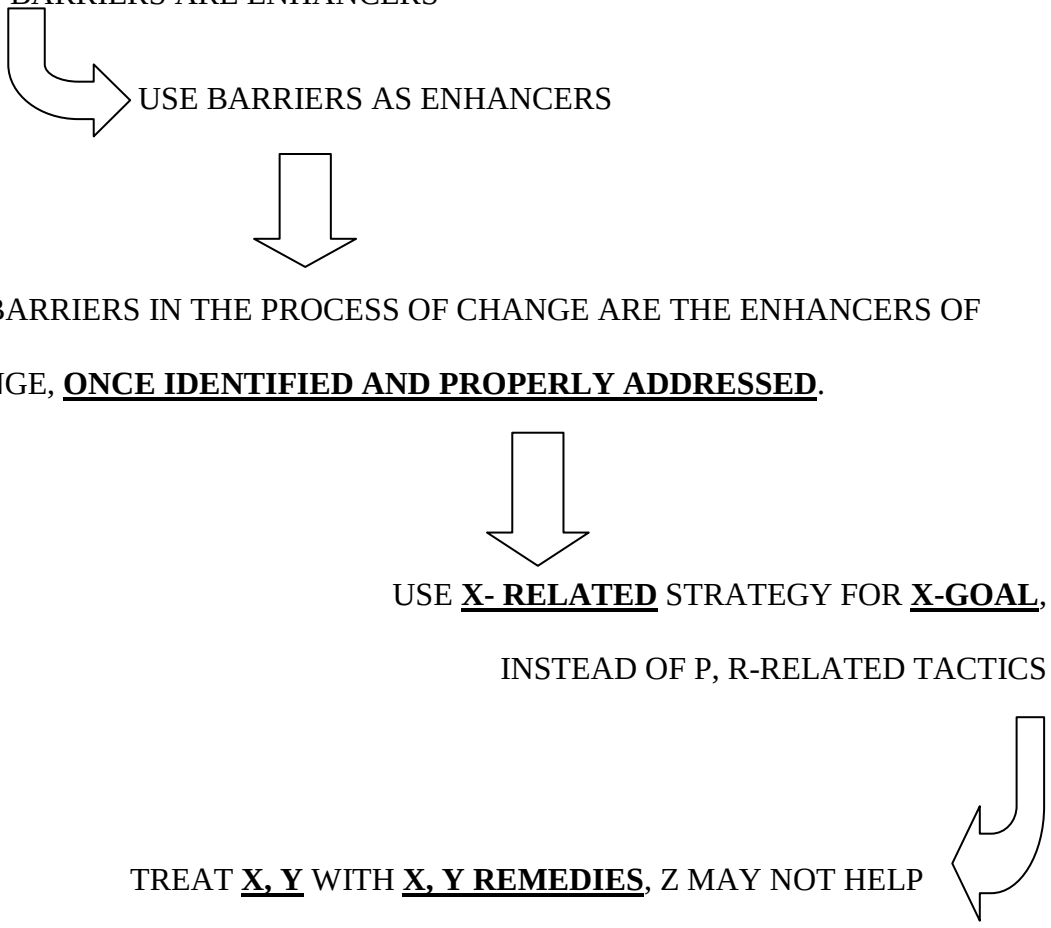
One recommendation that arises from this conclusion is that it is important for organizations to identify barriers then develop strategies to transform the organization's change efforts and increase the likelihood of measurable success. Taking into consideration the inductive path in this research, we can replicate it as follows:

Figure 2: Understanding the transformation process



The transformational process can be represented as shown in Figure 3:

Figure 3: The Turning Point in Transformation



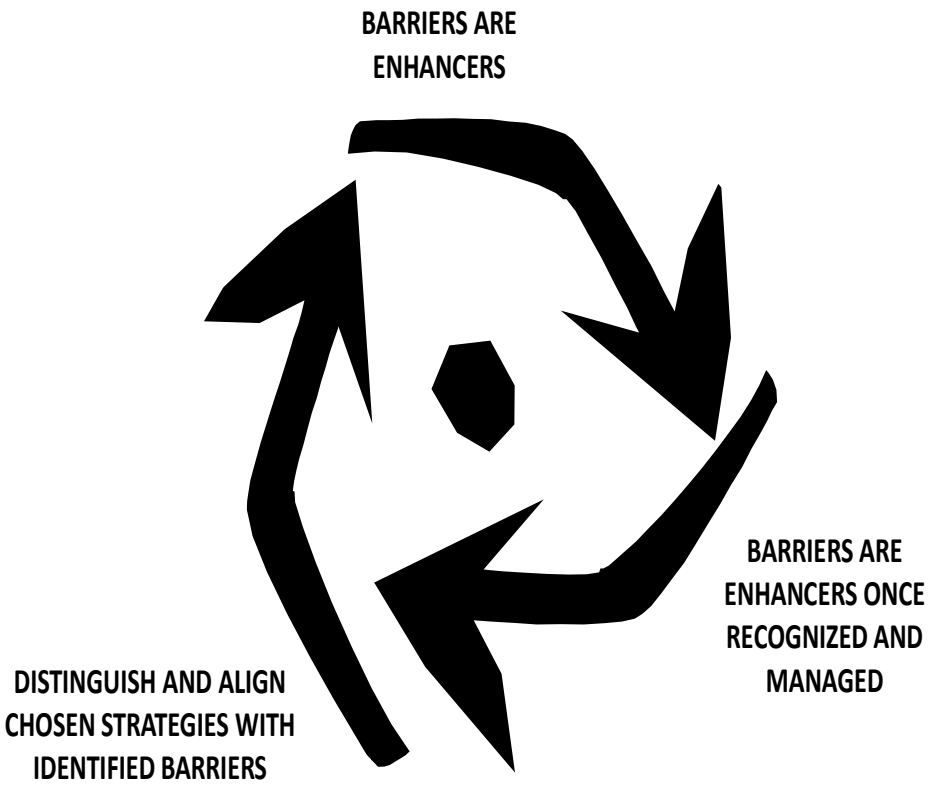
Subsequently, the above illustration can be condensed into a (positive version of a vicious) cycle: “A condition in which a disorder or disease gives rise to another that subsequently affects the first” (The American Heritage® Dictionary of the English Language, 2009).

Thus, there may be some changes in the environment which do become a problem for an organization and force a change upon it from outside the organization. Recognizing that there needs to be something done about it, a company decides to initiate efforts to transform itself to be better aligned with the environment and not lose its functionality.

Some ideas of transformation will ignore the problems (i.e., complex structure, inefficient work organization), which may be unintentional. Many others will try innovative methods that promise great results, but these great results can probably be achieved only when a company is rather problems free. Many will try to follow some methods with strictly pointed out factors to use, that may not be useful in a particular situation (renovating culture and communication channels without changing structure and work organization). Following these the problems will became barriers blocking whatever change efforts were undertaken, further pushing the company into even wider misalignment with the environment, as the time passes. This will become a vicious negative cycle. Other organizations for various reasons will turn to more basic thinking, the bare minimum of “let us see what is not working here and try to correct it”. Was that thought of as the main way of transferring organization? It was probably considered more as preparing a good start for the transformation. Either way, the problems causing the disconnection with the environment get to be identified (the vertical structure of the organization costs way too much money, effort and delay in operating, resulting in losing to the faster, more flexible competitors; work organization is not efficient) and a suitable solution is applied (flattening the structure; which will free a lot of money and allow for flexibility and short idea-end product cycle).

Following, the organization is gaining its place in the environment back and sort of "all of the sudden" the very issues that were the barriers are now the enhancers to the transformation (flattening the structure will make reforming work organization much, much easier) and effective performance.

Figure 4: Picture of the Vicious Cycle



Literature related to the conclusions of this study

The overall conclusion of this research is:

> "Barriers can be successfully used as enhancers in the process of change"
>
> and is being assumed as a method of managing transformation processes.

There are published studies/articles that seem to confirm the results of this study, especially as they relate to the importance of the original eight variables on organizational change efforts. In addition, the importance of the leader in change efforts can be generalized with greater confidence. On one hand the inductive variables suggest that the original research assumptions of the presence of factors unique to DOD organizations is accurate, but there are also sufficient reasons to invalidate speculation that DOD has some undisclosed factors / techniques that we could identify and learn from (which was the underlying goal of this project).

Very similar patterns of change were found in Greiner's 1967 study of 18 organizational change attempts (as cited in Rainey, 2009, p.407). Greiner describes "diagnosis and recognition" as a part of transformational process. Interesting thing however, is that in his study it was always "a new person (that enters as a change agent)"; "the newcomer uses his or her objective, external perspective to encourage examination of old views and rationalizations and attention to "real" problems". Then the "top management becomes heavily involved…," suggesting that the (external) consultants were open enough to see the real problems and the top management alone had been going in some other direction.

Either way this similar finding was described in late 1960s. Rainey (2009, p.407) states that “about thirty years later Kotter (1995)…” cited Greiner’s article while working on his own research regarding transformation. Kotter’s (1996) findings may be considered parallel with this study’s conclusion about barriers and enhancers.

Kotter identified eight most common errors in the change processes, and they are: Some of the most common errors when transforming an organization are: (1) Allowing too much complacency, (2) Failing to create a sufficiently powerful guiding coalition, (3) Underestimating the power of vision, (4) Under communicating the vision by a factor of 10x-100x, (5) Permitting obstacles to block the new vision, (6) Failing to create short-term wins, (7) Declaring victory too soon, (8) Neglecting to anchor changes firmly in the corporate culture .

In 1996, Kotter introduced his “Eight step guide to successful change”: (1) Establishing a sense of Urgency, (2) Creating a guiding coalition, (3) Developing a vision and strategy, (4) Communicating the changed vision, (5) Empowering broad-base action, (6) Generating short-term wins, (7) Consolidating gains and producing more change, (8) Anchoring new approaches in culture. It is interesting to note how the errors and successful steps closely mirror each other.

Table 25: Kotter's Common Errors and Steps to Successful Change

Eight most common errors	Eight step guide to successful change
under communicating	establishing sense of urgency
Failing to create a sufficiently powerful guiding coalition	forming a powerful guiding coalition
Underestimating the power of vision	creating a vision
Under communicating the vision by a factor of 10x-100x	communicating the vision
Permitting obstacles to block the new vision	empowering others to act on the vision
Failing to create short-term wins	planning for & creating short term wins
Declaring victory too soon / too much complacency	consolidating improvements & creating more change
Neglecting to anchor changes firmly in the corporate culture	institutionalizing change approaches

However, while he suggested that they were flip sides of the same coin, this research suggests that they have an interactive effect that influences change efforts when a turning point is reached, but stalls change efforts when no transformation occurs.

Similar comparisons can be made between the results of this study and conclusions drawn by Entin and Serfaty comments (1999) about adaptive team coordination when they conclude that high-performing organizations demonstrate improved coordination when they recognize high degrees of incongruence. It is a task to identify the barriers and find a good solution for them. However once this is done, the barrier is not only neutralized, but very often accelerates the change process towards improved functioning. And this is why one should start from identifying the problems in

the system. That would give enough pointers about what diminishes efficiency and subsequently needs to be reorganized.

Authors of one the examined cases also came to similar conclusion (Ladd et al, 2006): “It is interesting to note that while meeting transforming needs, the solutions for those needs, more often than not, are significant attributes of the highly successful, flexible and adaptive organizations” (c.28, p.6). A panel of Army officers undertook the issue of acquiring, educating and developing military personnel. Responsibility for this multi-phase and prolonged process was highly fragmented. Overall, the staff that was already acquired and trained still lacked the “integrated, cross enterprise knowledge needed to support operations and make rapid, accurate decisions” (c. 28).

There were plans to change the organizational structure, but they did not consider possible transformational realignments, consolidations. With stove-piped data and unsynchronized makeover of processing centers the overall, transition was getting nowhere. The course of change was accompanied with developing of new software which further caused instability forcing schedule slippages, delays, adjustments, change of change implementation and obvious lack of evaluation.

While developing antidotes for identified problems, they came to a conclusion that the solutions (horizontal integration of data, reviewing and adjusting education, consolidating contracts for new software, 6-sigma improvement process etc) not only would eliminate the barriers, but would result in forming a “successful, flexible and adaptive” system, thus bringing much more than just removing the problems.

Beer, Einstat & Spector (1990) seem to make a similar statement when they explain that the focus of change depends on what needs to be changed. The authors concluded that in order to implement change, one needs to know what to change. Thus, the perception of what needs to be changed is crucial for transitional success. The inaccuracy of the subject of change more often than not is a major obstacle to the whole process of transition. For example, if a company needs to reorganize its work processes, but instead thinks that changing cost structure will help, then the existing problem will not get solved.

Similarly Kerr's (1975) article can be applied here. The essay mainly addresses rewarding systems, and ironical misalignment between organizational goals and offered incentives. The finding of "rewarding A while hoping for B" can be surprisingly widely applied, from reorganizing the incentive system to realigning work arrangements and organizational structure with the company's goals (p. 7). The subject matter is to use X-related strategies for X goals, instead of wasting the effort on M, N, O and P – related approaches. That translates easily into "treat X, Y with X, Y remedies, Z may not be useful here".

Since many times throughout this research I found medical terminology to be helpful in understanding the "use barriers as enhancers" oddity, I could not resist exploring a bit more the analogical link between DOD and medical ways of work. Hence, "barriers are the same as enhancers" discovery led to "use barriers as enhancers" presumption later extended to "the barriers in the process of change CAN become or actually ARE the enhancers of change, once identified and properly addressed". This

statement then was translated into “use X- related strategy for X-goal, instead of M, N, O, P tactics” or, as a matter of preference “ treat X, Y with X, Y remedies, Z may not help”.

Henceforward, a troubled patient (ineffective organization) comes to a doctor (management) not being able to function well. Neither she, nor the doctor, are sure of what the reason for the illness is. The doctor proceeds to analyze the symptoms and identify their causes (organizational obstacles). Once this is complete, we have a diagnosis and the treatment (change strategy) follows. Soon enough, the illness gives in to the treatment and/or medication and the patient regains the strength and ability to function again.

There a few versions of the situation:

A – an illness may not produce symptoms until developed into advanced, sometimes too late to reverse stages;

B – a patient comes with a problem X (hearing loss), but is unaware of having problem Y (cancer)

C – an unconscious patient being brought to a hospital does not describe the symptoms. The doctors have to guesstimate.

The situations A and C have a high potential for misdiagnosis with disastrous consequences. The doctors’ ability to trace the symptom back to its cause, the knowledge and effective use of available tools (tests, x-rays, EKG’s etc) is naturally directly linked to the patients’ wellbeing. Either the illness is correctly diagnosed,

treated, and the patient goes home being able to fulfill her roles (parent, worker, friend, volunteer etc) or is misdiagnosed and given a painkiller for the lung problems (Z-strategy for Y barrier), the patient progressively gets worse (unaccomplished objectives, mission), loses the ability to take care of herself, and ultimately dies (overall failure, bankruptcy, termination). If the misdiagnosed sickness is not as serious, the patient may eventually fight it off on her own or spend the rest of his life dealing with the more or less irritating problem.

Situation B (unawareness of the problem) may be disastrous as well. Due to lack of symptoms the illness develops to a point when it requires either a major treatment or causes death. Again, depending on the nature of undetected issue, the results may vary. If the patient goes home with ear tubes but undiagnosed cancer, her well-being is seriously endangered. If she goes home having treated cancer, but does not pick up quick enough that she's losing hearing, she may end up taking second mortgage to finance advanced hearing apparatus or rely on reading and writing to communicate. Neither situation is good, although the second patient can still perform her functions to some extent. Naturally, if the unnoticed illness is more like flu, the organism will most likely fight it off on its own.

Bottom line, the traditional and logical medical ways to keep us alive (prevention, periodic evaluations, correct diagnosis and treatment) do not seem so natural in managing business entities. Competition in the twenty-first century forced us to search for pro-active and innovative methods to keep our organizations ahead of the game. Those methods may certainly work magic but I assume only for generally healthy

companies. Organizational change turns out to belong to a different category. It has many characteristics of treatment, simple "if it's broken – fix it" approach, but surprisingly it has may result not only in bringing the organization back to health, but puts it on track of becoming a "successful, flexible and adaptive" company.

Based on results of this meta-analysis study and other researchers' observations the "using barriers as enhancers" or "diagnostic" approach to handling organizational change seems to be viable in real life and may prove to be worthy of being labeled as one of the "methods / techniques" in academic literature.

Did this research serve its purpose?

This study attempted to find factors that play a role in managing transition processes in the DOD organizations. Considering difficult by nature defense work settings, it was assumed that the staff has worked out their own methods to effect change. Identifying them was supposed to benefit the rest of us in the civilian world offering yet another way to handle organizational transformation, especially if it already works for DOD organizations. The study was supposed to benefit DOD personnel as well, and add to the limited strategies custom-tailored for them.

Considering the above, I think it is fair to state the study served its purpose. One could argue that it did reveal unique items to DOD organizations, even if it did not reveal completely unknown variables, or a secret procedure. The research also uncovered an unofficial, intuitive approach many of DOD personnel used in order to ensure successful reform. This is seen in the barrier and enhancer turning point/transformation cycle. The concept may not be new, but it certainly appears to

have been long forgotten in civilian world. Strangely enough it was emerging as something very odd. Bringing the name to it, discovering its trickery paid off in understanding its logic and high potential to produce better than expected results. The best feature of this method is that no matter what aspects of change emerge in your situation, this technique can be always applied and should work. Knowing about such "factor-transformation" methods proves to be very valuable when applying factors dictated by other routines does not bring expected outcomes. A more specific, true experiment or observation study should reveal if the finding of this study is useful, as assumed when managing organizational change.

Future research

Future research could certainly explore the findings from this study, in order to examine their consistency and efficacy in practice. Most importantly, we need to determine if there are ever any measurable outcomes from change efforts and why they do not get reported on a more regular basis. Is it just the time frame for publishing the results is too short to measure change, or do we really have nothing to report! Then, we need to expand our knowledge of the "barriers as enhancers" transformation method as an effective technique for managing change processes whether in civilian or military settings. More specific, deductive research could considerably strengthen (or disprove) this theory. Next, we need to systematically examine the factors that tend to remain as barriers in order to find a method of at least neutralizing their negative influence.

Expanding our understanding of this can help organizations to deliberately develop strategies to avoid the occurrence of barriers that stall change efforts. Another

stream in future research should examine situations where the process of change, leader, people and doctrine, as the most common factor present in these cases, are absent. Was the process of change handled differently? Were the results different? If so, then how was it handled and how does this modify the logical model proposed on the basis of these research results? How come the leader appeared so neutral to the process? And finally, we need a closer examination of relationships between the variables in transformation processes (one way relation between leader and people; relative independence of communication from other factors, etc). This could bring valuable insight to this so ubiquitous process.

References

Applebaum, S.H., & Wohl, L. (2000). Transformation or change: some prescriptions for health care organizations. *Managing Service Quality*, 10(5), 279-298.

Baker, K.A. (2002). *Organizational communication*. Retrieved April 22, 2008 from www.wren-network.net/resources/benchmark/13-OrganizationalCommunication.pdf.

Bass, B.M. (1985). *Leadership and performance beyond expectations.* New York: Free Press.

Beer, M., & Nohria, N. (2003). *Breaking the code of change,* as cited in Luecke, R. (2003). *Managing Change and Transition.* Cambridge, MA: Harvard Business School Press, 10-12.

Beer, M., Einstat, R. A., & Spector, B. (1990). *The critical path to corporate renewal,* as cited in Yukl, G. (2005). *Leadership in organizations* (6th ed.). Boston, MA: Prentice Hall.

Brockbank, B.J., (2006 October). The future is now. *Leadership excellence*, 23(10), 16.

Burke, W.W. (2002). *Organization change: theory and practice*. Thousand Oaks, CA: Sage Publications.

Burns, B. (2003). Managing change and changing managers from ABC to XYZ. *The Journal of Management Development*, 22(7), 627-642.

Burns, J. (1978). *Leadership*. New York: Harper & Row.

Burns, T., & Stalker, G.M. (1961). Mechanistic and organic systems, as cited in Natemeyer, W., & McMahon J.T. (Eds.), (2001). *Classics of organizational behavior* (3rd ed.). IL: Waveland Press.

Campbell S., & Samiec E. (2006, March). You can't win at golf with one club. *Leadership Excellence*, 23(3), 9-10.

Chantrill, C. (n.d.). US Government Spending. Retrieved April 10, 2010 from Time Series Chart of US Government Spending: http://www.usgovernmentspending.com

Conger, J.A., & Kanungo, R.N. (1998). *Five behavioral attributes of charismatic leaders*. Retrieved March 11, 2008 from www.12manage.com

Congressional Budget Office. (2008). Retrieved April 10, 2010 from http://www.cbo.gov/budget/historical.shtml

Downton, J. V. (1973). *Rebel leadership.* New York: Free Press.

Duck, J.D. (1993). Managing change: The art of balancing. *Harvard Business Review*.71(6), 109-118

Entin, E.E., & Serfaty, D. (1999). Adaptive team coordination. *Journal of Human. Factors*, 41(2), 321-325.

Fayol, H. (1916). The general management principles. Retrieved April 2, 2010 from www.12manage.com/methods_fayol_14_principles_of_management.html

Foster, G. (1994). *In Search of a Post-Cold War Security Structure,* as cited in Runzi, C. O. (2007). *Transforming the National Security Council, Interagency Authority, Organization, Doctrine.* Retrived March 8, 2008 from http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA467251&Location=U2&doc=GetTRDoc.pdf

Franklin, A. (2006). Organizational Behavior.Lecture. Norman, OK: University of Oklahoma.

French, J. R. P. Jr., & Coch, L. (1948). Overcoming Resistance to Change, as cited in Natemeyer, W. & McMahon, J.T. (Eds.), (2001). *Classics of organizational behavior* (3rd ed.), IL: Waveland Press.

French, J. & Raven, B. (1959). The Bases of Social Power, as cited in Natemeyer, W. & McMahon J.T. (Eds.). 2001. *Classics of organizational behavior*, (3rd ed.), IL: Waveland Press.

Fuhr, D. (2006). *The Future Army National Guard: Easing Contemporary Challenges of Transformation.* Retrived March 8, 2008 from http://usacac.army.mil/cac2/call/index.asp

Gabert, T. (2006). Organizational Leadership. Lecture. Norman, OK: University of Oklahoma.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Gersick, C. (1991). Revolutionary change theories: A multi-level exploration of the punctuated equilibrium paradigm, as cited in Burke, W.W. (2002). *Organization change: theory and practice*. Thousand Oaks, CA: Sage Publications.

Golembiewski, R.T. (1985). *Humanizing public organizations,* as cited in Rainey, H. G. (2009). *Understanding and Managing Organizational Change and Development*. San Francisco, CA: Jossey-Bass.

Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ*. New York: Bantam Books.

Gray, C. S. (2006). *Recognizing and Understanding Revolution Change in Warfare.* Retrieved March, 8, 2008 from http://www.strategicstudiesinstitute.army.mil/pubs/summary.cfm?q=640

Greenleaf, R.K. (1970). *Center for servant leadership*. Retrieved March 13, 2008 from http://www.greenleaf.org/whatissl/index.html

Greiner, L.E. (1967). Patterns of organizational change, as cited in Rainey, H. G. (2009). *Understanding and managing organizational change and development*. San Francisco, CA: Jossey-Bass.

Guzzo, R.A., Jackson, S.E., & Katzell R.A. (2009, September). Computing services for faculty and staff. Retrieved April 13, 2010 from http://www.rci.rutgers.edu/~sjacksox/PDF/MetaAnalysisAnalysis.pdf

Hammer ,M., & Champy, J., (1993). Reengineering work processes, as cited in Hoag, B.G., Ritschard, H.V., & Cooper, C.L., (2002). Obstacles to effective organizational change: The underlying reasons. *Leadership and Development Journal* 24(5), 273-284.

Heller, F., &Yukl, G. (1969). Participation, managerial decision making and situational variables. *Organizational Behavior and Human Performance*, 4, 227-241.

Hersey, P., & Blanchard, K. H. (1977). *Management of organizational behavior: Utilizing human resources*, (3rd ed.). New Jersey: Prentice Hall.

Herzberg, F. (1967). One more time: How do you motivate employees?, as cited in Natemeyer W., & McMahon J.T., (Eds.). (2001). *Classics of organizational behavior*, (3rd ed.). IL: Waveland Press.

Higgs, M. (2006). The challenge of change management…What do we really know about effective leadership in change management? *Executive Action*, 178, *The Conference Board*.

Hoag, B.G., Ritschard, H., & Cooper, C.L. (2002). Obstacles to effective org change: the underlying reasons. *Leadership and Development Journal*, 23 (1) 6–15.

House, R.J. (1971). A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, 16, 321-339.

House, R.J. (1977). *Four phrases defining charismatic leader*, as cited in 12.manage.com. Retrieved March 11, 2008, from http://www.12manage.com

House, R.J., & Aditya, R.N. (1997). The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23, 409-473.

Huczynski, A., & Buchanan, D.A. (2003). Organizational behaviour: An introductory text**.** Financial Times Management. Retrieved on April 2, 2010, from http://www.som.cranfield.ac.uk/som/knowledgeinterchange/media/summary/Organizational%20Behaviour.pdf .

Hull, J. P. (1998, September). When It's Time to Pay Their Dues. . . Retrived March 8, 2008, from http://usacac.army.mil/cac2/call/index.asp

Jansen, K.J. (2000). The emerging dynamics of change: resistance, readiness, and momentum. *Human Resources Planning*, 23(22), 53-55.

Johnson, C.L. (2006). *Transformation of installation management: An analysis of organizational change.* Retrieved March 8, 2010, from http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA448585&Location=U2&doc=GetTRDoc.pdf .

Jones, R.A., Jimmieson, N.L., & Griffiths, A. (2005). The impact of organizational culture and reshaping capabilities on change implementation success: The mediating role of readiness for change. J*ournal of Management Studies*, 42(2), 361-386.

Katz, D., & Kahn, R.L. (1966). The social psychology of organizations. NY: Wiley.

Kerr, S. (1975). On the folly of rewarding A, while hoping for B. *Academy of Management Journal*, 18, 769-783.

Kihlstrom, J. F., & Cantor, N., Social Intelligence, as cited in Sternberg, R.J. (Ed.). (2000). *Handbook of intelligence* (2nd ed.). Cambridge, U.K.: Cambridge University Press, 359-379.

Kotter, J.P. (1995). Leading change: Why transformation efforts fail. *Harvard Business Review*, March-April, 1-10.

Kotter, J. P. (2007). Leading change: Why transformation efforts fail. *Harvard Business Review*, 85(1), 96-103.

Kotter, J.P. (2010). *Kotter International* . Retrieved April 10, 2010, from http://www.kotterinternational.com/KotterPrinciples/ChangeSteps.aspx

Kotter, J.P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.

Kouzes, J.M., & Posner, B.Z (1995). *The leadership challenge.* San Francisco, CA: Jossey-Bass.

Ladd, D., Noah, M; Ralph, J; West, H; Barnes, J; Vehlow, C; (2006) *Army Business Transformation – Next Steps,* Retrieved March 8, 2008, from http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA474764&Location=U2&doc=GetTRDoc.pdf .

Lawrence, P.R., & Lorsh, J.W. (1961). *Organization and environment*. Homewood, IL: Richard D. Irwin.

Lewin, K. (1951). *Field theory in social science: Selected theoretical papers.* D. Cartwright (Ed.). New York: Harper & Row.

Likert, R. (1967). A look at management systems, as cited in Natemeyer W., & McMahon J.T. (Eds.). (2001). *Classics of organizational behavior* (3rd ed.). IL: Waveland Press.

Locke, E.A., & Latham, G.P. (1979). A motivational technique that works, as cited in Natemeyer W., & McMahon J.T. (Eds.). (2001). *Classics of organizational behavior* (3rd ed.). IL: Waveland Press.

Locke, E.A., Shaw, K.N., Saari, L.M. & Latham, G.P. (1981). Goal setting and task performance: 1969-1980. *Psychological Bulletin*, 90, 125-152.

Luecke, R. (2003). *Managing change and transition.* Boston, MA: Harvard Business School Press**.**

Martin ,A.J., Jones, E.S., & Callan, V.J. (2006). Status differences in employee adjustment during organizational change. *Journal of Managerial Psychology*, 21(2), 145-162.

McNamara, C. (2010) Basic Overview of Organizational Life Cycles. Retrieved March 8, 2010, from www.managementhelp.org/org_thry/org_cycl.htm.

Nadler, D., & Tushman M. (1977.). A Diagnostic Model for Organizational Behavior. In E. E. Richard J. Hackman, *In Perspectives on Behavior in Organizations.* New York: McGraw-Hill.

Nelson, R. R., & Winter, S. G. (1982). *An evolutionary theory of economic change*. Cambridge, Mass.: Belknap Press of Harvard University Press.

Natemeyer, W., & McMahon, J.T. (Eds.). (2001). *Classics of organizational behavior* (3rd ed.). IL: Waveland Press.

Northouse, P.G. (2003). *Leadership, theory and practice* (3rd ed.). Thousand Oaks, CA: Sage Publications.

O'Hair, D. (2006). Organizational Communication. Lecture. Norman, OK: University of Oklahoma.

Poole, M.S., & Van de Ven, A.H. (Eds.). (2004). *Handbook of Organizational Change and Innovation*. Oxford, NY: Oxford University Press.

Poole, M. S., & Hollingshead, A. B. (Eds.). (2005). *Theories of small groups: Interdisciplinary perspectives*. Thousand Oaks, CA: Sage Publications Inc.

Prahalad, C.K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, May-June 79-91.

Rainey, H. G. (2009). *Understanding and managing organizational change and development*. San Francisco, CA: Jossey Bass.

Ramayah, T., Jantan, M., Harun, Z., & Rajagopal M. R. G. *Managing change: Antecendents and implications of the change process.* Retrived September 25, 2007, from www.management.usm.my.

Robbins, S. P. (2005). *Essentials of organizational behavior*. Upper Saddle River, NJ: Pearson Prentice Hall.

Robertson, E. (1998). Leadership and communication – a powerful partnership. *Strategic Communication Management,* 2(4),12-15.

Rumsfeld, R. (2001, September 10). United States Department of Defense. Retrieved March 8, 2010, http://www.defense.gov/Speeches/Speech.aspx?SpeechID=43.

Salovey, P., & Mayer, J. (1990). Emotional intelligence, as cited in Yukl, G. (2005). *Leadership in organizations.* (6th ed), Upper Saddle River, NJ: Prentice Hall.

Schein, E. (1992). *Organizational Culture and Leadership.* San Fransico, CA: Jossey-Bass.

Scott, R. W. (2006, June). *The state of the art and the state of the practice. Organizing on the edge.* Retrieved March 8, 2008, from http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA463505&Location=U2&doc=GetTRDoc.pdf.

Sellars, T. J. (2006). *National Guard.* Retrieved March 8, 2008, from http://usacac.army.mil/cac2/call/archives.asp.

Senge, Peter M. (1990). The Learning Organization as cited in Natemeyer W., & McMahon J.T. (Eds.). (2001). *Classics of organizational behavior* (3rd ed.). IL: Waveland Press.

Seo, M. G., Putnam L. L., & Bartunek, J.M. (2004). Dualities and tensions of planned organizational change, as cited in Poole, M.S., & Van de Ven, A.H. (Eds.). (2004). *Handbook of organizational change and innovation*. Oxford, NY: Oxford University Press.

Smith, I., (2006) Continuing professional development and workplace learning 15: achieving successful organizational change: do's and don't's of change management. *Library Management*, 27(4/5), 300-306.

Strauss, G. (1977). Managerial practices, as cited in Hackman, J.R., & Suttle, J.L. (Eds.), *Improving life at work: Behavioral science approaches to organizational change* .Santa Monica, CA: Good Year.

Tannenbaum, R., Schmidt, W. H. (1958). How to choose a Leadership Pattern . *Harvard Business Review*. March-April , 95-101.

The American Heritage® Dictionary of the English Language, F. E. (2009). Dictionary. Retrieved April 16, 2010, from www.dictionary.com.

Thorndike, R. L. (1936). Factor analysis of social and abstract intelligence. *Journal of Educational Psychology,* 27, 231–233.

Todd, B. (2006). Organizational Change for Improved C2 in the Information Age. Retrieved March 8, 2008, from http://usacac.army.mil/cac2/call/index.asp.

Torres, N.J. (2007). *Global war on terrorism: executing war without unity of command.* Retrived March 8, 2008, from http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA469641&Location=U2&doc=GetTRDoc.pdf.

Tushman, M. L., & Romanelli, E. (1985) Organizational evolution: A metamorphosis model of convergence and reorientation, as cited in Cummings, L.L., & Staw, B.M. (Eds.) *Research in organizational behavior*. Greenwich, CT: JAI Press.

United States Department of Labor. Retrieved April 10, 2010, from http://www.bls.gov/oco/cg/cgs041.htm.

US Legal .(2010). *USLegal*. Retrieved April 12, 20010, from http://definitions.uslegal.com/m/managing-organizational-change/.

Vroom, V. H., & Yetton, P.W. (1973). Leadership and Decision Making, as cited in Yukl G. (2005). *Leadership in organizations.* (6th ed). Upper Saddle River, NJ: Prentice Hall.

Warden, J.A. III, & Russell, L.A. (2006). *Winning in fast time.* Montgomery, AL: Venturist Publishing.

Warren, J. (2005). *Air Force Organizational Transformation: merging the Active and Reserve Components.* Retrieved March 8, 2008, from http://handle.dtic.mil/100.2/ADA432286.

Weber, M. (1922). *Charismatic leadership*. Retrieved March 11, 2008 from 12manage.com.

Wechsler, D. (1939). *The measurement and appraisal of adult intelligence*. Baltimore, MD: The Williams & Wilkins Company.

Wright, K.L., & Thompsen, J.A. (1997). Building the people's capacity for change. *The TQM Magazine.* 9(1), 36-41.

Young, M., & Post, J.E. (1993). Managing to communicate, communicating to manage: How leading companies communicate with employees. *Organizational Dynamics*, 22(1), 31-43.

Yukl, G. (2005). *Leadership in organizations.* (6th ed.). Upper Saddle River, NJ: Prentice Hall.