

Strategy Research Project

Modernize the Culture; Equip the Force

by

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Abstract

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Modernize the Culture; Equip the Force

The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking.

—Albert Einstein¹

Albert Einstein's timeless quote compels us to understand, appreciate and recognize our thoughts, mental practices, and to some degree, our philosophy must transform first – if we desire change. Einstein's writings and reflections on change centered on the ideas of inspirations. Einstein encouraged us to be passionately curious, use our imagination, take risks, seek understanding and view change as something that we should always desire and strive for. There are numerous examples of cultural change management in the business world that follow Einstein's very ideas. Jeff Bezos, Chief Executive Officer of Amazon, recently stated his main job is to focus on culture – a culture of high standards, operational excellence, inventiveness, willingness to fail, and a willingness to make bold experiments.² Culture and change management can be viewed as a process to drive individual and organizations to achieve intended outcomes, adapt to market or environmental conditions or simply, to enable a new vision for success. Within the Department of Defense (DOD) changing culture can follow the same rules and thought processes. However, some believe that the Department of Defense has an inherently change-resistant culture, is slow to embrace innovative change and has a culture intolerant of failure.³ Within the Defense acquisition community the same holds true. Defense acquisition has been labeled cumbersome, frustrating, antiquated, and its culture is overly bureaucratic, slow, and risk averse. Each of these issues runs completely opposite to the recommendations of Einstein and Bezos.

Recently, the U.S. Army announced the formation of a new command that seeks to integrate the different functions of the acquisition system to rework business practices, streamline and speed processes, accept greater risk, lower acquisition costs, and reform the modernization effort. Some believe this shift could be the biggest and most radical change for the U.S. Army in the development and procurement processes over the last sixty years. The question remains, how will an organizational change modify or alter the defense acquisition culture to accomplish the stated goals and vision?

The primary purpose of this research paper is to offer suggestions that may be useful during the formation of the U.S. Army's new command. The first part of this paper provides a conceptual framework to offer a way for cultural and organizational change, a historical view on structure and acquisition organizations, background on acquisition reform and the current defense acquisition system. The second portion of this paper applies the framework, using the historical perspective, research collected and subsequent analysis to offer suggestions with respect to building the U.S. Army's Futures Command.

Conceptual Framework: Organizational and Cultural Change

John Kotter's 1995 Harvard Business Review article, *Leading Change: Why Transformation Efforts Fail* and international bestselling book, *Leading Change*, is considered the foremost guide on change management, leadership and organizational culture. Kotter developed the process to guide change which has been used by business, non-profit and government agencies alike. Kotter's eight-step change process was shaped with the understanding and study of successful transformations based on one fundamental insight – "that major change will not happen easily."⁴ Through study

and years of observation, Kotter developed the process to produce significant useful change stemming from restructuring, acquisitions, downsizing, cultural renewal, and other quality programs.⁵ Kotter's approach reengineers processes, alters strategies and improves quality by addressing the barriers at play that limit the full potential of an organization.

Kotter's eight-step process is a sequential methodology explaining the subordinate actions and potential transitions points to achieve the desired goals of change. Commonalities across all steps include continuous communication, identifying opportunities, creating vehicles for change, fostering relationships and team work, encouraging experimentation, questioning the norms, and managing transitions. Within the Department of Defense, Kotter's techniques can be used for the same purpose.



Figure 1. John Kotter's 8-Step Change Process⁶

Establishing and creating a sense of urgency to examine and account for the competitive realities is the initial step of the change process. According to John Kotter, the initial step is the most important of the eight. The competitive realities within DOD

are defined by risk which is easily translated as either risk to mission or risk to personnel. Defining risk and executing a high risk mission is common place within the Department of Defense, however defining and assuming risk within the acquisition process is not. Some believe that Kotter's methodology is difficult to apply within the military's bureaucratic structures. The primary concerns stem from a belief with a lack of senior leader access, ability to exercise the influence necessary or the push back from the organization is too strong, with respect to change.⁷ Additionally, there is concern given the size and complexity of large military organizations and the strong dependence on external stakeholders, such as Congress, may cause leaders to employ strategies and actions that modify or even deviate from Kotter's process.⁸ Each of these counterpoints offer valid reasons "why not," but Kotter's method is time proven. Knowing the concerns beforehand will be critical to accomplishing the required change. As Kotter points out, change will be hard and will take effort.

Creating and guiding the coalition forms the second action. Kotter believes that major transformations are often associated with one highly visible individual, but believed that successful transformation "could be 5 or 15 or 50 people with a shared commitment to excellence through renewal."⁹ Hence, the true nature of the second measure is a strong guiding coalition focused on four key characteristics: first, position power; second, expertise; third, credibility, and fourth, proven leadership to drive the change process. The team must be formed on trust and common goals. Simply put, small teams can solve big problems.

The third step is team development and formation of a shared vision and strategy for change. The vision will describe and create an image of the future organization and

specifically the intended accomplishments. The strategy is the method the organization intends to use to accomplish its goals and vision. For Kotter, an effective vision must be imaginable (a picture), desirable (appeals to stakeholders), feasible (realistic goals), focused (clear decisions), flexible (allows for changing conditions), and communicable (explained easily within 5 minutes). The vision is not top-down or senior leader driven, but focused on organizational and team developed.

Communicating the change vision is the fourth step. Kotter uses the metaphor for “Enlisting a Volunteer Army” to communicate the vision.¹⁰ The goal for communicating the vision is to have common understanding across the organization. For large organizations this is a lofty goal. Communicating the vision must be clear, concise, simple, and memorable, often repeated, consistently communicated from multiple sources, and modeled by executive behavior.¹¹ This is why Kotter’s third step and specific point on being clear, concise and limited to a few minutes is import.

What is empowering employees for broad-based action? Kotter’s fifth step is one that focuses in on the “why” an organizational structure can undermine vision. Kotter believes that the organization’s personnel and information systems must align to the vision to allow subordinates to initiate actions. One critical aspect to empowerment is formalized employee training. Training is necessary to provide the right skills and attitudes and “tap into an enormous source of power” at all levels of the organization.¹²

Kotter’s sixth step allows the organization to realize the change and potentially see the difference by gaining short-term wins. Generating short-term wins is useful because major changes can take time or as Kotter states “sometimes lots of time.”¹³ Short term wins are intermediate objectives designed to realize improvements to assist

with the previous steps. Short term wins are sometimes called quick wins. The characteristics – visible, unambiguous, and related to the change effort – help define the purpose and are essential to the overall effort.

The seventh step is to consolidate gains and produce more change. Consolidation of gains is something the military is familiar with, though defined differently. Successful and major change effort may require more help and a continued focus on elimination and identifying unnecessary interdependencies. The continued realization of accomplishments allows the organization to truly feel a sense of change and accomplishment.

The eighth step and potentially the longest in the process, is anchoring the new approaches into the organizational culture. Kotter's metaphor is "shallow roots require constant watering."¹⁴ An organization's culture is the shared values, beliefs, assumptions, and behaviors that contribute to how people behave within the environment. Some think changing culture is hard, very hard, but not impossible. Kotter believes culture is very powerful for three primary reasons: first, because individuals are selected and indoctrinated so well; second, the culture exerts itself through the actions of hundreds or thousands of people; and lastly, because all of this happens without much conscious intent and thus is difficult to challenge or even discuss.¹⁵ Kotter's anchoring process is fundamentally shaped by five principles where, first, change "comes last, not first" and will be at the end of the process; second, change "depends on results" and is superior to the old methods; third, "Requires a lot of talk" by superiors with feedback from subordinates; and fourth, "May involve turnover" which may require removing key people. The fifth and last principle can be viewed in a positive or negative

light, which is “making decisions on succession crucial” because promotions help the process and / or removing someone that could allow the old culture in reasserting itself might also be necessary.¹⁶

History: U.S. Army Acquisition, Development and Modernization Force Structures

The Department of the Army is organized into four types of managing headquarters and supporting activities – Army Headquarters staff elements and the Army Commands, Army Service Component Commands, Direct Reporting Units, and Field Operating Agencies.¹⁷ Each of these elements serves a different purpose, but is inextricably tied together. An example of the relationship occurs within the material development and sustainment force structures. The three Army Commands are Forces Command (FORSCOM), TRADOC (Training and Doctrine Command), and Army Material Command (AMC). These three, along with the Department of the Army secretariat and staff sections each have elements of the acquisition, development and modernization structure. Some postulate, that given this very distributed structure the process lacks unity of command, lacks a coherent vision of the future, and is formed on an industrial-age process which causes slow delivery of new weapon systems. The current process requires continuous coordination among each of the Commands, Army Staff, and Secretariat levels to function.

The existing structure dates back to a chain of studies, reviews, reports and Army wide redesigns that occurred in the 1960s and 1970s. The basic premise was to improve the Army structure with the following goals:

- Resolve the Army’s “uncoordinated command structure” stemming from the 1948 Defense reorganization¹⁸

- Eliminate inherent conflicts between responsibilities (example: institutional training while simultaneous command of ground combat troops)
- Increase operational efficiencies and clearly delineate priorities and functions
- Review, analyze, critique, and recommend improvements of the Army's materiel acquisition process¹⁹

From the outputs and redesign, each of the different commands histories and processes were formed.

The AMC was founded in 1962, following the studies directed by Secretary of Defense Robert McNamara called Department of Defense Project 80. One of the studies was to determine how well the Army's organizational structure was responding to changes in the defense environment.²⁰ The Hoelscher report, named for the Deputy Comptroller of the Army Leonard Hoelscher, recommended that the materiel functions of the technical services and the testing functions of the U.S. Continental Army Command (CONARC) be moved and combined into a new organization – AMC.²¹

During the war in Vietnam, certain aspects of Project 80 were delayed. Larger Army reorganizational and reform efforts were put on hold until the end of the war. At the end of the Viet Nam Conflict, Army leaders believed additional and much larger change was in order. Change that would manage the current problems and concerns plaguing the Army – modernization, training, and education – were identified and in need of sweeping organizational changes. A general consensus inside the Army, plus “sufficient pressure from Department of Defense and Congress” required a study to review the adequacy and effectiveness of existing structure.²² Then, Lieutenant General William E. DePuy, the Assistant Vice Chief of Staff of the Army, led the development of a plan that eventually became guidance for the U.S. Army's reorganization.²³ The

follow-on guidance, impact studies, and implementation instructions were called *Operation STEADFAST*.²⁴ General DePuy stated the *STEADFAST* approval process, within the U.S. Army and in DOD, should be put in the *Guinness Book of World Records*, because it took roughly one week from concept to final approval.²⁵ Of note, the full preceding study was roughly a year and a half long.

As part of *STEADFAST*, Continental Army Command would again split, this time into two parts – TRADOC and FORSCOM. Training and Doctrine Command's charter from the beginning is the intertwined missions of preparing the Army for war and being the architect of the Army's future.²⁶ Training and Doctrine Command's continued mission is to recruit, train, develop, and build Soldiers and Leaders for our Army. They are also charged with guiding the Army's Future, developing the Army's doctrine and integrating the Army's capabilities and material. Forces Command is the largest command within the U.S. Army and is charged with the training and preparation of combat ready forces to meet Combatant Commander's requirements.

The mission of AMC would continue to adapt during the second split of CONARC. In April of 1974, a special Army Materiel Acquisition Review Committee was established to conduct a comprehensive review, analysis and critique of the Army's materiel acquisition process, plus make recommendations for improvement and procedures in AMC. The committee recommended "that independent development and logistics organizations be established to improve management of both acquisition and readiness activities."²⁷

Acquisition Reform

The same decades that produced and shaped AMC, FORSCOM, and TRADOC gave us the foundations of the acquisition process. Since the ending of the Cold War,

numerous changes to laws, regulations, technology enhancements, and funding levels have occurred. Currently, acquisition reform is arguably one of main topics of discussion – along with funding levels, troop strengths, global risks, peer competitor, and modernization – concerning the United States Military. Senator John McCain recently declared “acquisition reform is one of the most important — and frustrating — topics this [Senate Arms Services] committee addresses.”²⁸ Over the last thirty plus years, DOD acquisition reform has been the desired and stated goals of Presidents and congressional leaders alike. Numerous Industry leaders have sought the same reforms, though for different purposes, as they navigated the yearly or perennial changes to the acquisition processes within DOD. There have been numerous studies, reviews, books, papers, inquiries, and investigations on acquisition reform over the years.

One of those reviews was the monumental work from the United States Army’s Center of Military Historian, J. Ronald Fox, *Defense Acquisition Reform, 1960-2009: An Elusive Goal*, which sought to document, understand and capture the outcomes and recommendations on defense acquisition reforms.²⁹ Prior to the 1960s there was no formal acquisition policy across the defense department, largely because the “secretary of defense either did not have the authority or did not choose to enforce such a policy.”³⁰ The work by Fox reviewed the key studies, save those from institutions such as the Government Accounting office (GAO) and other smaller works. The acquisition reform project looked at twenty-seven major studies and came to the same general conclusions. Of note and almost of a paradox, the work by the CMH was never finished because funding was withdrawn before most of the findings were published. Below is a synthesis of the findings.

Many notable studies of defense acquisition with recommendations for changes have been published, and each has reached the same general findings with similar recommendations. However, despite the defense community's intent to reform the acquisition process, the difficulty of the problem and the associated politics, combined with organizational dynamics that are resistant to change, have led to only minor improvements. The problems of schedule slippages, cost growth, and shortfalls in technical performance on defense acquisition programs have remained much the same throughout this period.³¹

Reviewing the major studies, one key timeframe stands out. Most agree that the period of study occurring during the mid-1980s had the biggest impact and longest lasting effect on acquisition reform. During the early 1980s, President Ronald Reagan presided over the biggest peacetime defense buildup in United States history. At the height of the Reagan build-up, the defense budget "exceeded 6.5% of the United States Gross Domestic Product (GDP), whereas today, the budget stands at 3.3%, including the cost of ongoing conflicts."³² As the defense department began to modernize, numerous large weapon system programs experienced cost overruns and were unable to meet the projected schedule within the programmed funding levels. The need for continued acquisition reform was evident. In 1985 President Ronald Reagan's Blue Ribbon Commission on Defense Management, known as the Packard Commission, recommended nine major focus areas of change within defense acquisition. The recommendations were legislated for implementation within the *Goldwater-Nichols Department of Defense Reorganization Act of 1986* which created "a precipice for significant defense acquisition reform and facilitated and influenced significant changes in the decades that followed."³³ Even today, Congress and the Department of Defense are still wrestling with some of the recommendations, findings, and legislation from the Packard Commission and the *Goldwater-Nichols Act (GNA)*.

Below are the Packard Commission focus areas:

Streamline Acquisition Organization and Procedures; Use Technology to Reduce Cost; Balance Cost and Performance; Stabilize Programs; Expand the Use of Commercial Products; Increase the Use of Competition; Clarify the Need for Technical Data Rights; Enhance the Quality of Acquisition Personnel; and Improve the Capability for Industrial Mobilization³⁴

Arguably, each of these focus areas have stood the test of time and continue to be key items of implementation and sustained efforts. Many consider the Packard Commission and the GNA to be the most significant contribution to defense acquisition reform targeting acquisition by considering collectively all three components of the system – Planning, Programming, Budgeting, and Execution (PPBE), Defense Acquisition System (DAS), and requirements generation. The GNA greatly changed the basic structure focused at ensuring the system was aligned and functioning for the time period.

An example within the U.S. Army was the creation of an Assistant Secretary of the Army for Research, Development, and Acquisition, along with a Military Deputy, plus the Under Secretary of the Army was named the Army Acquisition Executive. However, not all GNA reforms have been implemented. Over the last thirty plus years numerous legislative changes have focused on individual aspects of the system, but not a consolidated view like the Blue Ribbon Commission and the GNA. Additionally, DOD has focused on individual policies, thus creating an even more bureaucratic mess within the defense acquisition system.

Defense Acquisition

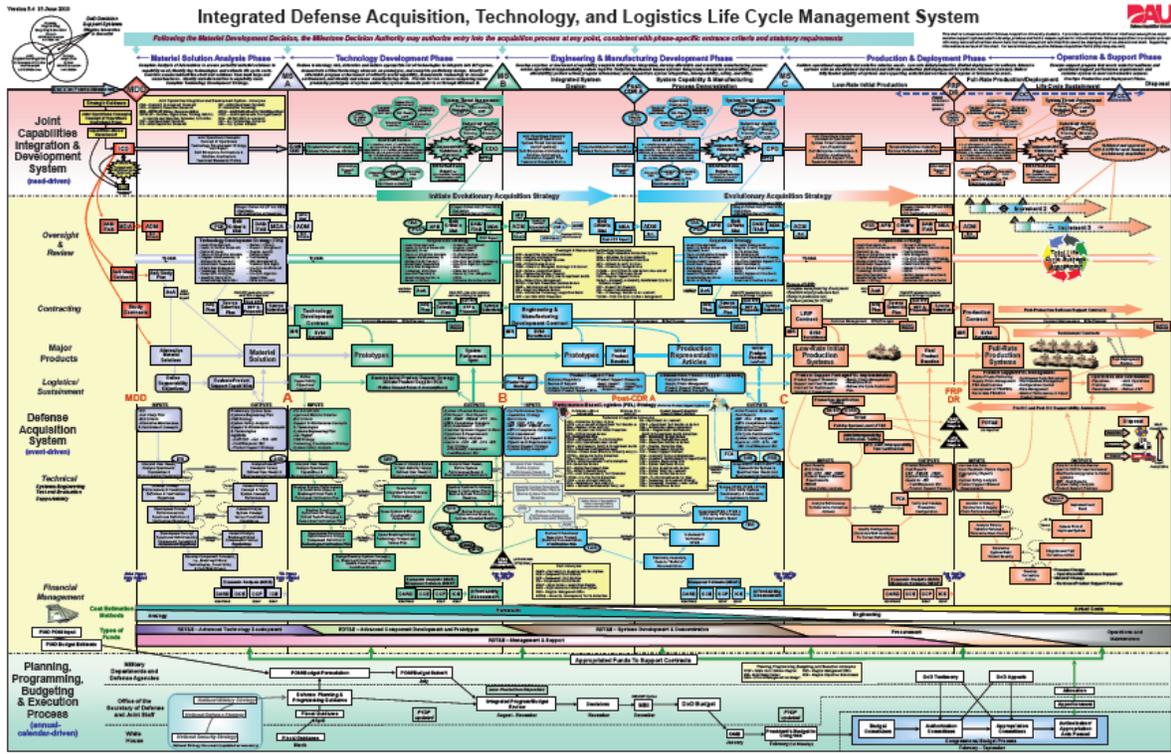


Figure 2. Integrated Defense Acquisition, Technology, Logistics Life Cycle Management Chart “Wall Chart”³⁵

The Integrated Defense Acquisition, Technology, Logistics Life Cycle Management Chart, also known as the *Wall Chart*, has been called the “Pentagon’s Craziest PowerPoint slide” ever.³⁶ Officially, the Department of Defense’s Defense Acquisition University calls the chart ILC – short for Interactive Life Cycle chart. The ILC is an interactive training aid and serves as the pictorial roadmap of key activities in the defense acquisition system.³⁷ The pictorial processes shown in the ILC are based on current system and regulations in the Department of Defense Instruction 5000.02 – Operation of the Defense Acquisition System.³⁸ The questions often asked when attempting to make sense of the system is where to start, what are the individual components, and who makes up the force or proponent that drives it.

Defense acquisition is the people and processes that interact within the system designed to manage the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the United States Armed Forces.³⁹ Defense acquisition encompasses research and development, engineering, contracting, test and evaluation, and the fielding of the weapon systems vital to our nation's security. The acquisition system has the fundamental purpose to advance materiel solutions that enable the military to "retain our advantage against advanced adversaries and a broad range of other potential threats."⁴⁰ The process of identifying the need to counter the threats is the Joint Capabilities Integration and Development System (JCIDS). If the need is a material solution for the procurement of a new weapon system, then the DAS is used in tandem with JCIDS process to satisfy it.

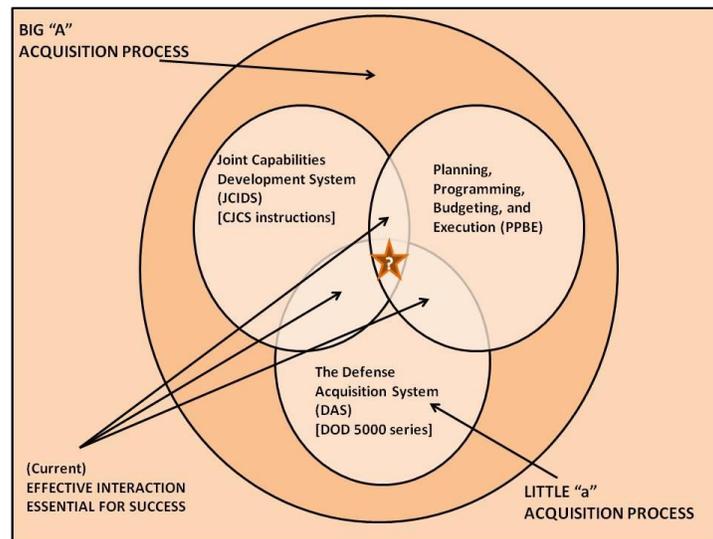


Figure 3. DOD Decision Support System⁴¹

The "Big A" acquisition process depicted in the Venn diagram highlights the possible logical relations between the three primary common elements of defense acquisition. The overlapping areas within the Venn diagram represent the coordination, communication and interaction points that must be effective and are essential for

success of the system. General DePuy's thoughts serve as a useful example of the circular process and the interaction between the subordinate systems within the DAS. The DAS is event driven, in that the boards, working groups, steering committees, and cells take place when there is a need for decisions or transitions.

The relationship between the research community, the developers and the users, is clearly circular. That is, the relationship is interactive and continuously so, as with all circles, there is no point of origin and no end point. Research is not conducted without an awareness of potential applications. Development of those applications is not undertaken in an employment vacuum. Concepts of employment are a synthesis of tactical experience and new technical capabilities.⁴²

The PPBE are the processes used to allocate the resources (defense funding) to provide capabilities necessary in accomplishing the defense mission. The PPBE process is calendar driven during the course of 12 months. The annual process consists of three distinct, but interrelated, phases: planning, programming and budgeting.

The Joint Capabilities Development System is the system and procedures which defines acquisition requirements and evaluation criteria for future defense programs. JCIDS implements the requirements process. The JCIDS supports the Chairman of the Joint Chiefs of Staff and the Joint Requirements Oversight Council in identifying, assessing, and prioritizing joint military capability needs as required by law.⁴³ The JCIDS process is not calendar driven, but event driven based on the decision points, milestones, or need for coordination that are derived within the DAS.

The Defense Acquisition System, also called little "a", is the management process consisting of phases containing major activities and associated decision points, during which a system goes through research, development, test, and evaluation; production; fielding or deployment; sustainment; and disposal.⁴⁴ Currently, there are five phases, three milestone decisions, and four decision points within the DAS.

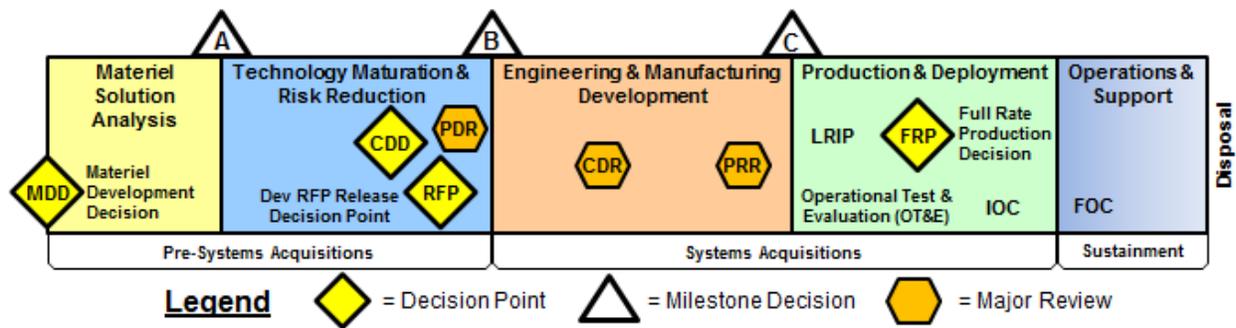


Figure 4. Acquisition Process⁴⁵

As detailed in Figure 4:

- 1) A Materiel Development Decision (Point), authorizing entry into the Materiel Solution Analysis (MSA) phase;
- 2) Milestone A authorizing entry into the Technology Maturation and Risk Reduction (TMRR) phase;
- 3) Requirements Decision Point (Capability Development Document-Validation)[CDD-V] supporting a decision to commit to a set of requirements (subject to reconsideration and refinement);
- 4) Development Request For Proposal (RFP) Release Decision Point (DRFPRDP), authorizing release of the development RFP (typically for Engineering and Manufacturing Development phase),
- 5) Milestone B, authorizing program initiation and entry into the Engineering and Manufacturing Development (EMD) phase;
- 6) Milestone C, authorizing entry into Production and Deployment (P&D) phase (authorizing Low Rate Initial Production) or Limited Deployment (for IT);
- 7) Full Rate Production Decision (Point), authorizing Full Rate Production or Full Deployment (for IT); and
- 8) Operations and Support (O&S) phase.⁴⁶

There are elements within DOD that skirt the process or have found ways to flourish. U.S. Special Operations Command (SOCOM) is unique among military commands because “it combines the operational authorities of a combatant commander with the acquisition authorities of a service.”⁴⁷ The SOCOM model is to buy, try, and decide, then acquire which is a faster way of getting critical equipment into the hands of the warfighter outside the normal, slow, and cumbersome acquisition system. The Naval Nuclear Propulsion Program is another example of long term stability and differing acquisition authorities. Currently DOD and the Department of Energy have oversight, with the head of Naval Reactors is a four-star admiral appointed for an eight-year term

to ensure unity of command and effort within the process.⁴⁸ The Defense Advanced Research Projects Agency is an agency within DOD with a singular and enduring mission: to make pivotal investments in breakthrough technologies focused on transformational change instead of incremental advances that combines academic, corporate and governmental partners to create new strategic opportunities and novel tactical options.⁴⁹ Commonalities exist among these elements besides funding authorities. The first commonality is that they are a single proponent that is responsible for the continuous systematic process for their modernization efforts and second, they seek a coordinated partnership with innovative partners that are driven at all levels.

The challenge for military leaders is to balance external stakeholder demands and expectations while enacting necessary change in the organization's best interest.⁵⁰ Forming new commands and making drastic and necessary changes have occurred before. A useful example of "building" and changing the Army is *Task Force Modularity* initialed at the end of 2003. The Army's shift to modularity, from a division-centric force structure to a Brigade Combat Team-centric force structure during ongoing combat operations impacted the entire Army. The task force was tasked with identifying and providing forces to the wars in Iraq and Afghanistan. Then, Chief of Staff of the Army, General Schoomaker, intentionally put the task force outside of the Pentagon "so that they would not be beholden to existing processes and structures, and could live outside the bureaucratic pressures of Washington."⁵¹ The Army's processes, components, and most of its organizations were impacted along each of the elements of Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy. Large changes with new modular force doctrine with modified training pipelines

and training plans, acceleration of acquisition materiel, retrained and distributed personnel across the Army, established new facility requirements and began military construction, and enacted Army-wide policies to support the new organizations and their force generation.⁵²

Futures Command

The U.S. Army currently faces a “difficult truth: without changes to its modernization strategy, the Army risks losing qualitative tactical overmatch.”⁵³ In order for the Army to make organizational changes focused on streamlining the acquisition and modernization processes, reducing cost, and developing equipment more quickly to regain the competitive edge, cultural change must be inculcated at all levels. Lieutenant General Mike Murray, Deputy Chief of Staff – G8, recently testified before the Congressional Subcommittee on Airland and acknowledged the challenge is “culture more than anything else.”⁵⁴ Murray said, “It’s not just the acquisition process, the requirements process, the material delivery process, or the testing process, but it is the bureaucracy associated with it.”⁵⁵

The strategic vision for the Futures Command is to establish unity of command and unity of effort that consolidates the Army’s modernization processes under one roof.⁵⁶ The target date for initial operating capability of the new command is June 2018 with full operating capability (FOC) twelve months later. General Mark Milley, the Chief of Staff of the U.S. States Army stated that we must “shift gears” and focus on modernization “future readiness.”⁵⁷ During a Senate Armed Services Committee hearing on DOD acquisition reform efforts, the Secretary of the Army, Dr. Mark Esper testified that Futures Command will reduce the requirements development process from 60 months down to around 12 months.⁵⁸ Other key tasks include eliminating duplication of

effort; achieving organizational alignment; improving effectiveness within functional areas; increasing responsiveness with respect to current and foreseeable requirements, and making recommendations for any legal, statutory, or legislative changes.⁵⁹ The new command seeks to realign authorities, overcome bureaucratic inertia, break down stovepipes, bring warfighter requirements directly into the acquisition process; and, perhaps most important, enable disruption.⁶⁰ General Milley stated that we must build a modernization command to “posture the [Army] institution” and “restructure the institution; which will be the largest restructure in four decades.”⁶¹ The restructure and institutional alignment is meant to overcome stagnation within the requirements and modernization process. However, the Army’s strategist, Major General William Hix, acknowledged the risk, “the big thing we seek to avoid [in building the new command] is becoming a bureaucracy that eats a bureaucracy...we’re very conscious of that.”⁶² The new command “will be formed from existing structure and will combine elements of Army futures, concepts developments, requirements, and acquisition.”⁶³

The change effort and belief that we are at a point of losing our competitive edge is not only in the Army, but within DOD as well. During the 2017 Association of the United States Army convention, the Secretary of Defense Jim Mattis gave the Military Services very clear direction and guidance towards change. Secretary Mattis’s guidance came in the form of three lines of effort. The lines of effort are to review every personnel policy, training time and organization; strengthen alliances and build new partnerships; and lastly, ensure our business practices maintain full benefit from every dollar spent on defense.⁶⁴ Secretary Mattis stated that we must take “aggressive action to reform the way we do business, and to gain and to hold the trust of the Congress and the

American people, that we are responsible stewards of the money allocated to us, and that it translates directly, every dollar, into the defense of our country and what we stand for.”⁶⁵ Additionally, the *2018 National Defense Strategy* directs changes to allow organizations to adapt their structure and change their processes. The changes are focused on things that may hinder performance, require consolidation, or eliminate as needed to allow for innovation. The *National Military Strategy* specifically highlighted the need for cultural change, specifically with respect to acquisition, modernization, and budgeting. The change must focus on improving organizational culture to produce creative and adaptive leaders, adopting efficient and dynamic processes, developing flexible, interoperable capabilities and prioritizing material solutions.⁶⁶

The Army’s top six modernization priorities will be the first programs the new command will seek to deliver on. The priorities will be aligned under cross-functional teams (CFT) to enable horizontal integration. The CFTs will form the core of the new Futures Command.⁶⁷ The six priorities are Long-Range Precision Fires, Next-Generation Combat Vehicle, Future Vertical Lift, Air-and-missile defense, Soldier Lethality, and the network to support and integrate each of the priorities. Each of these priorities is specifically focused on regaining overmatch against near peer competitors. Kotter believes that the nature of change in highly interdependent systems forces change nearly everywhere because of the interconnections between elements and the net effect where, “You’ll end up making more changes than you imagined at first.”⁶⁸ The six focus areas potentially allow for real culture change to be achieved by selectively applying effort and resources to key pressure points in the Army institution.⁶⁹

Recommendations

The Army, while building its Futures Command, can realize improvements in the acquisition and the modernization process by following Kotter's change management process and consider adopting change in the following areas.

Develop a Sense of Urgency

As Kotter stated, developing a sense of urgency is the most important step and critical to the overall effectiveness of the change process. Urgency is fundamentally a "way of thinking, a way of feeling, and a way of behaving on a continuous basis."⁷⁰ Urgency is not a simple definition of doing something out of necessity or immediately. Given the size and proposed change to the U.S. Army *urgency* will be realized over the next two years. With FOC occurring summer of 2019 and budget management following, the continued sense of urgency will be critical. Accomplishment of intermediate objectives, short term goals and quick wins will be necessary to facilitate the drive for change. Each of these must be visible, unambiguous, and related to the change effort. Given the rate of change occurring in the world today, a daily sense of accomplishment, non-complacency, action, and organizational behavior change must occur throughout this period. Examples include developing an environment focused on urgency by removing bureaucratic processes such as meetings, boards, and cells that don't serve the overall purpose of garnering Senior Leader input, reducing cost, or scheduling delays. It also includes defining the expectations, consequences, response plans, confidence and appreciation of all actions.

Focus on Total Time Reduction

Although the name has changed, acquisition cycle times have been a problem since the Revolutionary War when military quartermasters were tasked with procuring

equipment for the army.⁷¹ Industry across the United States has noticeably decreased the production times for new products during the past twenty years. As an example, in the late 1980s, automakers took an average of eighty-four months to bring a new car to market where today, the same process takes twenty-four months.⁷² Current new material and equipment within DOD takes roughly 10-15 years and up to an additional 5 to 15 years of new equipment fielding. Reduction of the total time within the Defense Acquisitions System must be tracked and, to some degree acknowledged that there is no single area that is the problem, but collectively all elements within each phase are the problem and can be the solution. Additional examples include incentivizing early proposal submission to reduce lead times; use electronic (i.e., no paper) processing across all phases; ensure sound investments through analysis of requirements; reduce oversight (i.e., flatten the approval processes); and educate new service members on the processes prior to employment.

Establish Metrics to Track Performance and Outcomes⁷³

According to a GAO report on selected weapons programs, total costs have increased \$457 billion, or nearly 47 percent above their original estimates, with an average schedule delay of more than 29 months, across the 78 programs in the Pentagon's portfolio.⁷⁴ Establishing a measure of performance for each of the systems that accounts for the requirements process, the research and development, and procurement collectively, is necessary. Currently the U.S. Army does not track each of the efforts in a combined or Common Operating Picture (COP). The requirements generations tracks a system one way, the acquisitions side another, fielding and sustainment yet another way, all for the same piece of new equipment. Only through coordination and close communication across multiple commands does information get

disseminated. The collective metrics must focus on the future that aligns with the modernization strategy with the primary goal of overmatch and speed of acquisition. A single COP or 'dash board' is useful to ease frustrations within the system by allowing the people to see and understand what is going on within the process. Culturally this makes sense, but actions in practice would show otherwise.

Analytically Prioritize Requirements

The development of concepts and the analysis of cost, technical feasibility, risk, and uncertainty all require detailed and sophisticated study.⁷⁵ Currently requirements are generated based on need and risk. Requirements can come from many sources (e.g., Combatant Commands). Currently there is no method that analytically prioritizes the process. Additionally, within the same process the requirements development is too specific. Some call the process building a 'golden egg' where the requirement is almost unobtainable which does not allow for prototyping, ease of testing, and the ability to build material quickly.

Create a Culture of Experimentation and Risk Taking

Risks are those future events that can negatively impact a program either through cost, schedule or performance and are managed by developing and implementing a sound, well-coordinated risk management plan and then tracked.⁷⁶ Root cause analysis determines the risk, where the risk is avoided, assumed, transferred, or as the primary method mitigated.⁷⁷ In 1990, the GAO started tracking DOD Weapon System Acquisition as part of their *High-Risk Series*.⁷⁸ The programs are reviewed in terms of risk towards cost, schedule, and performance with numerous examples on best practices, reforms, and initiatives. Currently most of the analysis occurs within the

Project Management team, but with a command focused on the Army's priorities more can be done to increase awareness and be part of the solution and decision cycles.

Adapt Personnel Management Rules, Create Stability and Focus on Talent Management

There is a belief that numerous programs have been lost because of the rapid turnover of people and loss of key leadership.⁷⁹ The DOD Acquisition Workforce is comprised of over 153,000 civilian and military personnel employed in support the process of engineering, procurement, testing, and evaluation. The Army has roughly one quarter of the effort and has taken a number of actions to improve its requirements development process for major defense acquisition programs.⁸⁰ Following tens of billions of dollars in U.S. Army spending over the last decade to develop new weaponry, multiple failures have added up, some with little or nothing to show for the costs.⁸¹ Focused acquisition education and on-boarding is a critical component of the talent management. Changing the personnel management system to allow for longer (or if necessary short) terms within Futures Command. For military personnel, the assignment within the DAS is not prestigious. The positions are not seen as 'must fill' when compared to Joint, Command, or Senior Leader immediate staff positions. For civilian personnel the assignments are typically longer, but are focused on stability and system understanding versus change, efficiency, and short term accomplishments. Army Futures Command can use Fellowships as a useful tool to ensure future position fills and as a means of communicating the significance of the command.

A supplementary element of increasing the desire to serve within the new command is to fill additional positions with Military Occupational Specialties (MOS) specialties within each element of the system, including operators and maintenance

personnel of current and future systems. This is in addition to the MOS related positions within the CFTs. This forms the bases of Kotter's process where it is not leader driven, but a team approach and anchoring within the organization. This could potentially speed process, lessen redundancy, and rework the current business practices.

Early and Often Soldier Involvement in the Testing Process

Soldiers should be part of the development & requirements process in order to deliver the capability expected at the end of the process. Soldiers coupled with engineers create a better system. It is surprising that Soldier involvement does not occur in each phases of process even knowing that most innovation tends to rise from the "bottom up more often than directed from the top down."⁸² This includes Soldier involvement in the TMRR and EMD phases, prior to the Operational Test and Evaluation when most Soldiers and units test new equipment prior to production decisions.

Enhance Work Flow, Improve Relationships and Effectiveness (Network Approach)

Google believes much of the work done within their company, and in many organizations, is done collaboratively by teams.⁸³ Google's, *Project Aristotle*, was a study focused on helping codify the secrets to team effectiveness where they gathered 180 teams, conducted 200-plus interviews, and analyzed over 250 different team attributes, but struggled to find a clear pattern of team characteristics.⁸⁴ Interestingly, when Google measured the importance of each of the views from key associates, they were different. Executives were most concerned with results, but team members said that team culture was the most important measure of team effectiveness and fittingly, the team lead's concept of effectiveness spanned both the big picture and the

individuals' concerns.⁸⁵ Cross Functional Teams will form the foundation of Futures Command, which is a start, but must be maintained well into the future.

Enhance and Restructure the Test and Evaluation Process (No Redundant Testing)

Structure encompasses all the formal and informal aspects of the organization that can enhance or impede pursuit of the stated mission and goals.⁸⁶ The testing process is integral to the performance outcomes of a system. Bottom-line, the goals originally specified under the requirements process should be what is tested with no additional testing. Operational testing and evaluation is warranted, but through analytics and Soldier involvement early and often the end result will produce less duplication and effort.

Determine a Location Facilitating Cultural Change, Coordination, and Development

The U.S. Army will use and define criteria that will evaluate the future location in terms of ease of coordination, cost, and to some argue what is on hand. Within the real-estate business the mantra is – location, location, and location. The same attention to ‘where’ something is holds true within the military. The location of the new command will play an extremely important role in its ability to accomplish its assigned mission. To truly focus on the outcome – quicker, cheaper, more effective modernization – the process cannot be burdensome. The Center for Army Analysis developed a Military Value Analysis (MVA) model to look at installation and infrastructure attributes for stationing new units during the Army’s transformation (2003-2007). The MVA will be a useful tool, but only to the extent that culture, work flow, and networking are prioritized over cost of living and current bases, camps, or stations.

Numerous governors and Senators will most likely weigh in and sell the Army leadership on the premise of the nexus of educational, industrial, and workforce within

their states or districts. It is these aspects that facilitate the additive nature to culture and networking.

Conclusion

The U.S. Army is on its way to one of the largest organizational changes in the last fifty to sixty years. The Army continues to be an organization that has “evolved to meet the challenges over more than 240 years, and we will change yet again to meet the challenges of the future.”⁸⁷ Einstein’s quote referencing change and the way we think are still valid and true as it has ever been. The hazards and risks are too high for the future force and our nation’s national security not to change. Kotter believed that major change often takes a considerable amount of time. Kotter believes there are forces that can stall the process far short of the finish line such as bad luck, turnover of key change agents, sheer exhaustion on the part of leaders or stakeholders, or even tradition which can “sweep back in with remarkable force and speed.”⁸⁸ As long as the U.S. Army continues to view modernization as a priority, accept cultural change within the requirements and acquisition systems, and continue to focus and adapt to the changing environment success will be achieved. The future is bright and promising!

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