Senior Service College Fellowship

Research Summaries

Warren Seminar

as of July 2016
INTRODUCTION

The Senior Service College Fellowship (SSCF) develops civilian acquisition leaders in preparation for roles as product and project managers, program executive officers, and other key acquisition positions. SSCF also helps prepare participants for positions in the Senior Executive Service (SES). The program is intense but does provide the time to think and reflect—normally not available in the government workplace.

Fellows who successfully complete the fellowship are equipped to:

- Apply the knowledge and leadership tools gained to assume positions with higher levels of responsibility within the government;
- Lead and strategically guide at the highest levels in the DoD;
- Mentor individuals within their commands and areas of responsibilities; and
- Operate at the most senior levels within the government.

The Research Program is a core area of the Fellowship. It supports a broad-based education by expanding and providing for the further self-administered expansion of one’s horizons by developing the intellectual skills and building the spirit of inquiry necessary for a lifelong pursuit of learning. The Research Program requires the Fellows to read (to acquire knowledge), to discuss (to subject one’s views to the rigors of disputation), to investigate (to learn how to ask the right questions and how to find the right answers), and to write (to impose structure on one’s thoughts).

This booklet summarizes the work of the SSCF Warren Seminar since its inception in 2007. Additional information may be obtained from the SSCF Warren Director’s Office at (586) 276-2171 or visiting DAU”s SSCF webpage at http://www.dau.mil/sscf/default.aspx.
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As more companies enter into the service business instead of the manufacturing business, employees have become an organization’s most important assets. This has led to a different focus on what is needed for good leadership. One increasingly important requirement for good leadership with these changes is emotional intelligence. This study surveyed the senior leaders at TACOM to assess their self-reported emotional intelligence. The paper also examined the impact of the training programs currently offered to TACOM employees on their emotional intelligence.

This study focused on the emotional intelligence of TACOM senior leaders. At the time of the study, there were 907 people in senior leadership positions, defined as being at a GS-14 or equivalent level and above, across five organizations at TACOM. This study determined how emotionally intelligent the TACOM senior leaders are, and whether the leadership training being offered to these leaders increased their emotional intelligence. Factors such as leadership experience, gender, and military background were also examined to determine their effects on emotional intelligence.

Daniel Goleman’s theory of emotional intelligence using five constructs (Self-Awareness, Self-Regulation, Motivation, Empathy, and Social Skills) provided the framework for this study. The findings of the research show overall TACOM senior leaders have effective emotional intelligence, with some areas that could be improved. Additional findings show that factors, such as the number of leadership courses taken and the years of leadership experience, have a statistically significant effect on emotional intelligence. Factors such as gender, age, and military experience do not have a statistically significant effect on emotional intelligence.
Foreign Military Sales (FMS) is a Department of Defense (DOD) process through which defense goods and services produced by U.S. manufacturers are sold to foreign purchasers. It is the primary mechanism administered by Defense Security Cooperation Agency (DSCA), an organization under DOD and integrated with several key DOD agencies, to build defense capacities of allies and partners of the U.S. to enhance global security and peace. Sales through the FMS program create an opportunity for cost reduction and avoidance for U.S. defense acquisition programs through several familiar pathways such as economies of scale and scope, learning/experience curve advantages, R&D recoupments, and Production Line Gap measures. In addition, a non-traditional approach was considered in the study to associate the concept of brand equity to the FMS distribution channel, resulting in brand dividends that are used to lower U.S. acquisition costs. A notional scenario analysis was conducted in the study to determine cost savings based on FMS growth of 2%, 10%, and 25%. Two variations of the notional scenarios, one using a 90% experience curve and the other using a 70% experience curve, were considered for the cost savings due to FMS. With the 90% experience curve, R&D recoupments and brand equity considerations, for sales through the FMS process, total cost reductions of $1075.3M, $1186.4M and $1444.7M were realized from revenues of $14.6B, $15.6B, and $17.8B respectively. With the 70% experience curve, R&D recoupments, and brand equity considerations, for sales through the FMS process, cost savings of $1768.7M, $1969.8M, and $2447.1M were generated or $14.6B, $15.6B, and $17.8B of revenues respectively.
Effective organizational change requires an understanding of what motivates human beings to accept change, as well as under what conditions they are likely to become fearful and resistant to change. As shown by extensive research, job satisfaction has been linked to productivity, motivation, absenteeism/tardiness, accidents, mental/physical health, and general life satisfaction (Landy, 1978). This study evaluated the key change management factors for implementing change and their impact on employee job satisfaction. It also assessed the organizational change types relative to their impact on job satisfaction and discusses some of the change models that could assist with organizational change.

The results show a clear and significant relationship between seven job satisfaction constructs (overall satisfaction, job security, growth and development, pay and benefits, relevance of job, feelings towards co-workers, and supervisor support) and the key change management factors (informed stakeholder, planning committed leadership, aligned workforce, defined governance). As implementation of the key change factors increases, job satisfaction improves. Based on the data, the most common predictors were informed stakeholder, followed by committed leadership, and then aligned workforce. The statistical analysis results also showed that regardless of the change type (restructuring, process-oriented, or technological), job satisfaction was not impacted. The comments received from the open-ended questions were categorically themed around communication leadership and employee buy-in. These comments relative to change implementation were similar to the key change factor predictors on job satisfaction.
The Army begins teaching its Soldiers about leadership from day one. The Army values of loyalty, duty, respect, selfless service, honor, integrity and personal courage are summed up in the acronym of LEADERSHIP. This contrasts with the civilian side of the Army where employees spend years learning primarily the technical aspects of their jobs and training through to be certified at various levels of knowledge and expertise. Only when they are promoted into team leader or supervisory positions do they receive any formal leadership training.

Mentoring has been identified as an important influence in professional development in both the public and private sector (OMB, 2008, p.2). In the Army civilian workforce, mentoring has been a hit or miss proposition. There have been mentoring guides, handbooks and best practices published to provide guidance on how best to mentor the workforce. In addition, to further improve the government workforce, the Federal Workforce Flexibility Act of 2004, Public Law 108-411, requires agencies to provide training to managers on mentoring employees (OMB, 2008, p.2).

When it comes to leadership development, Mentoring is considered one of the pillars in the overall process. In a briefing to the Senior Service College Fellows on July 26, 2012, LTG Bill Phillips discussed the subject of developing the workforce for success. The pillars of support for leadership development were presented as the Army Capstone Concept. Other pillars in the development structure include training, education and experience (Phillips, 2012.) Through the effective utilization of these pillars, Army civilians are able to build upon their knowledge as they move forward in their careers. However, the development and execution of formal mentoring programs has been left up to the discretion at the organizational level. Based on a number of the comments received in the survey related to this research, many see formal mentoring programs as only for the select few and not widely available to the majority of the workforce.
Unmanned Aerial Vehicles (UAVs) have numerous military applications, including reconnaissance, search and rescue, and surveillance. UAV technology remains largely underutilized as a means to enhance logistics operations. This research explored the application of UAVs for Logistics Operations for the Army. This included an investigation of the technology currently available, restrictions impeding the advancement of UAVs for logistics operations, the advantages of using UAVs for logistics operations, and public opinion towards the use of UAVs for logistics operations. The four main questions investigated and answered by this research were: (1) What UAV technology is currently available to meet the needs of logistics operations? (2) What restrictions are impeding the use of UAVs for logistics operations? (3) What are the advantages of using UAVs for logistics operations? and (4) What is public opinion towards the use of UAVs for logistics operations?

Research has shown that the Army Strategic Logistics Plan (ASLP) envisions a transformation of Army Logistics, requiring increased mobility, speed, and responsiveness, while simultaneously decreasing the logistics foot print (U.S. Army, 2000). UAV technology corresponds unequivocally to these needs, and seems poised to dominate future logistics operations. The US Army predicts that almost all cargo and sustainment missions will be completed by unmanned vehicles by 2035, but current logistics operations involving UAVs remain perplexingly limited (U.S. Department of Defense, 2013).

This research investigated and documented current UAV technology, its use, and the advantages, disadvantages, limitations, and potential for enhancing logistics operations it presents. A survey was conducted to gauge public opinion towards the use of UAV’s for logistics operations. This survey measured the perception towards the use of UAVs for logistics operations, concerns, and perceived benefits of the technology. Quantitative research was used to assess the potential of UAVs for logistics operations.
Effectiveness of Matrix Organizations at the TACOM LCMC by J. Scott Baumgartner

Organizations in the aerospace and defense industries have implemented the matrix structure extensively to reduce resource requirements, and achieve multiple simultaneous goals. The matrix structure is found in most large companies that deal with more than one product or geographic region. The potential for efficiency gains and increased customer satisfaction have made this an attractive organizational structure for most industries. However, implementation of the matrix structure has proven to be difficult and results have been mixed. This paper identified the characteristics of an effective matrix organizational structure; compared those characteristics with those of matrix organizations at the Tank-Automotive and Armaments Command (TACOM) Life Cycle Management Command (LCMC); and identified opportunities to increase the effectiveness of matrix structures at TACOM LCMC.
This research focused on TACOM’s civilian workforce surveying 1,000 civilian employees to assess the leadership skills of male and female leaders. The questions were directed toward employee satisfaction with their leader, leader related commitment, leader support, and the ability for both leaders and subordinates to take charge of a given situation. The survey consisted of ten demographic items, 29 factors within the workplace, and two open-ended and two direct preference or perceived difference questions relating to the gender of leaders.

The key factors were to identify the most significant differences in the leadership styles of male and female leaders at the TACOM LCMC; differences in employee satisfaction with male and female leadership styles; and the implications of these differences for employee motivation, commitment, and future leadership development.

The survey was sent to 1,000 employees and 188 responses were received. 64.5% of the respondents were male; 35.5% were female. The main finding was that there is no difference between the leadership styles of male and female leaders. It was also found that employees are marginally more satisfied with female than male leaders.

The most enlightening aspects were that the respondents felt that gender is not the real factor that makes for a successful leadership style. The associates surveyed responded that training, experience, and qualities both positive and negative could be found in either gender. Another enlightening aspect was how honest and forthcoming the associates were in their open-ended comments. They felt comfortable sharing both the positive and negative insights from their experiences.
The purpose of this study was to determine the workplace factors that affect employees’ decisions to participate in flexible work arrangements (FWAs) within the Heavy Brigade Combat Team Project management office (PM-HBCT) in Warren, MI. The policies within PM-HBCT have allowed the use of FWAs for many years and many employees have participated in the program. For the last 20 years, there has been increasing evidence that FWAs benefit both the employer and employee. However, there has been little research on the factors that affect employees’ decisions to participate in FWA. A 2005 WorldatWork survey found that employers appreciate increased productivity, retention rates, and employee morale, while employees benefit by structuring their work life around their personal life. The objective of this research was to determine which workplace factors affect the use of FWAs by slightly modifying an electronic survey that was developed by Alysa Lambert for her dissertation on the same research topic. All civilian employees within PM-HBCT were invited to take the survey, which consisted of five demographic, 29 close-ended, and three open-ended questions.

101 participants completed the survey. The 29 close-ended questions (quantitative data) were analyzed using descriptive research methods, and the three open-ended questions (qualitative data) were analyzed using thematic analysis. Results from the survey indicated that 74% of the participants believed their supervisor was supportive of their use of FWAs, 60% felt their coworkers supported their use of FWAs, and 66% agreed the organizational culture supported their use of FWAs. The results of this study identified recommendations to increase the workplace support for the use of FWAs in the organization, and provided leaders, managers and supervisors with a greater understanding of the influence they have regarding the use of FWAs.
In these times of dynamic change and increasing demand to do more with less, leaders who are skilled at leading, championing change, and transforming organizations will be in high demand. Unfortunately, few leaders have been trained in skills for leading change. This research was designed to determine: the extent to which employees believe TACOM supervisors possess these change, or transformational, leadership skills; if these skills vary across organizations at TACOM; and if employees’ experience, educational level, age, and gender affect their views of their leaders’ transformational skills.

The survey was sent to the TACOM LCMC workforce based at the Detroit Arsenal within seven organizations: the Integrated Logistics and Support Center (ILSC); the Tank Automotive Research, Development and Engineering Center (TARDEC); the Program Executive Office for Ground Combat Support (PEO-GCS); the Army Contracting Center – Warren (ACC-Warren); Installation Management Command (IMCOM); the Program Executive Office for Combat Support and Combat Service Support (PEO-CS&CSS); and the TACOM Staff. Analysis of the completed surveys shows there is a difference in perceived transformational leadership skills across several demographics.
Program Management at the Implementation Level: Enablers and Obstacles to Timely Acquisition by Ross Boelke

The Defense Acquisition System is the management framework and process by which the DoD acquires weapon systems, material, and services. The system is predicated on adherence to centralized policies and principles, but establishes the means for decentralized and streamlined execution of acquisition activities at the implementation level of the process. This approach is aimed at providing flexibility and encouraging management innovation where program management is performed while maintaining strict emphasis on program discipline and accountability of the managers involved in the process. The program manager is the individual primarily responsible for ensuring defense products in accordance with the guidelines established by the Defense Acquisition System.

The DoD 5000 Defense Acquisition System provides guidelines in the form of policies and procedures intended to support PMs management of their programs and meet, among other goals (i.e. cost, performance) acquisition timelines objectives. Despite these guidelines, DoD continues to get poor marks for responsive and timely delivery of defense capabilities. This research study sought a better understanding, at the program management implementation level of the process, what the enablers and obstacles were to being able to achieve timeliness in acquisition, and if the means provided program managers by the Defense Acquisition System effectively helped them reduce acquisition cycle time.
Motivating and Retaining a Quality Multi-Generational Workforce by Ronald Bokoch

The primary purpose of this research was to identify the rewards that most effectively motivate each of the four generations in the workplace at the TACOM LCMC. It identified the rewards most valued by the workforce in general and the relative preferences for rewards across generations. There were four generations at work within TACOM as of this writing: the Traditionalists (also called Veterans) born before 1946, Baby Boomers born 1946-1964, Generation X born 1965-1980, and Generation Y or the Millennials born 1981-2000. Reward preferences are categorized by the four generational cohorts and the paper also identifies the rewards most preferred by the overall population. In addition, this research provided two other key viewpoints of reward implementation at TACOM; it identified the rewards most utilized by supervisors and the workforce’s perception of what rewards are being given. This research found that similarities exist with regard to reward preference across the generations; a generation gap was only found in one case. Based on the value assessments of the 28 motivational factors included, we found that the birth cohorts generally agreed on their relative importance.

Meaningful Work, Health Insurance, Competitive Base Salary, and Promotions were consistently included in the top five most valued rewards across all four generational cohorts; only differences in regard to tuition reimbursement were considered significant. Changes in the reward system are one of the quickest and easiest ways to begin to change the culture of an organization. The more accurately managers can assess what motivates their employees, the more effective they will be at maximizing performance, enhancing productivity, decreasing absenteeism and turnover, and inspiring work beyond what is minimally required. The results of this study will allow managers to begin to formulate a reward system that attracts skilled workers, maximizes motivation, and reduces turnover. Workforce renewal and retaining quality employees are critical to TACOMs long term viability. Understanding reward preferences is a key part of accomplishing these goals.
Globalized Military Industry: Are Army Program Managers Prepared to Manage the Risks? by Clifton Boyd

The question this research attempted to answer is whether the formal training a PM receives is perceived as effective to identify and plan for the risks posed by a globalized contractor. The data gathered in support are summarized here:

- Analysis of course content revealed that none of the formal training courses addresses the risks presented in this research. Furthermore, only four out of 14 classes address the international or global context of executing a program in today’s environment.

- The structured interview initial objective of identifying the risks from operating with a globalized contractor was met, with each of the eight risks being reported by at least one interviewee. Data characterizing the likelihood and consequences for each risk were obtained. Further results report that PMs are average (2.5 out of 5) at identifying global contractors and their inherent risks. Interviewees confirmed the definition being used for globalized contractors and recommended formal training topics for Army PMs to prepare them for dealing with globalized contractors.

- The survey of Army PMs indicated that they perceived the SDD and Production phases are most at risk (61% and 62% respectively) when using a globalized contractor. The average agreement rate that risks existed was 50%. The highest agreements were with the risks of technical data protection (70%), software security/integrity (60%), and supply chain disruption (62%). An average of 52% of the Army PM’s felt their formal training did not effectively prepare them, with the largest areas of ineffectiveness found in dealing with legal differences (60%), software security/integrity (58%), and program disruption at foreign sites (58%). Out of the total population, an average of 25% agreed the risks were legitimate and perceived their training to be ineffective in preparing them to handle these risks. Size of program yielded no discernible differences in the results. Experience did prove to be a variable; with less experience, more recent PMs were less likely to declare their formal training ineffective or effective.
This research examined whether DOD acquisition program success improves for those programs being managed by personnel that completed an engineering degree program, an advanced non-technical degree program, or a Senior Service College Military Equivalent Level-1 (MEL-1) program. The study also examined whether program technical complexity has an impact on program success. The research employed a mixed methodology approach using a survey, completed by 251 program managers (PMs) across the military service and 78 Department of Army program managers across all Army Program Executive Offices (PEOs).

The study found statistically significant differences in program success due to the effects of holding a technical degree, the effects of holding an advanced non-technical degree, the effects of completing a Senior Service College Military Equivalent Level-1 (MEL-1) program, and the effects of technical complexity. However, the inferential statistical analysis using analysis of variance results in all cases were mixed, as were program manager opinions on the effects of completing an engineering degree program, an advanced non-technical degree program, or a MEL-1 program.

The final recommendations were that: completion of an engineering degree program should not be an important factor for selecting future program managers, completion of an advanced non-technical degree should be considered as one of the factors for the selection of program managers, completion of an SSC program should be considered as one of the factors for selecting a program manager for overseeing an ACAT I program, and technical complexity should be used as a factor for considering whether to select a program manager with an engineering background for overseeing highly technical ACAT I programs. Finally, it was recommended that the Army institute a new Acquisition Service College using a model similar to the Defense Acquisition University (DAU) Senior Service College Fellowship Program geared towards mid-career Acquisition Corp members with eight to twelve years of service to provide the skills necessary to oversee the Army’s increasingly complex weapons system acquisitions.
Globalization has brought significant benefits to the Program Manager (PM) by providing access to low cost manufacturing and state-of-the-art technology. Counterproductive to the advantages of globalization is the Berry Amendment, a law which directs the PM to procure military products with 100% domestic content. To effectively manage this paradox, the PM needs novel risk management strategies to procure Berry Amendment restricted goods in the globalized market place. The purpose of this research was to identify strategies for reducing the adverse impacts of the Berry Amendment on the cost, quality, and technology of goods and services purchased by the Department of Defense to support the warfighter, without sacrificing national security or economic interests in this era of globalization.
The purpose of this study was to determine if employee job motivation increases when first-line supervisors embrace and exhibit Transformational Leadership skills within five TACOM-LCMC subordinate organizations [TACOM Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO CS&CSS, and PEO GCS]. This research also determined if the employee’s gender, age group, and/or years of civilian government service moderates the effects of Transformational Leadership on employee job motivation. These five subordinate organizations, with a workforce of approximately 4,820 employees, served as the primary stakeholders for this research. The survey responses received equated to 437; 32 responses contained insufficient data for analysis responses. The completed survey responses used for the statistical analysis equated to 405; 142 of these responses came from other organizations located on Detroit Arsenal. The questions related to Transformational Leadership characteristics, which measured the extent to which first-line supervisors exhibited the following four primary dimensions of Transformational Leadership: idealized influence, inspiration, intellectual stimulation, and individual consideration. The researcher also posed questions related to these four primary dimensions of Transformational Leadership to gauge the employees’ level of job motivation and to determine if gender, age group, and/or years of civilian government service moderate the impacts of transformational leadership on employee’s job motivation.

The primary research findings affirmed a statistically significant relationship between Transformational Leadership and employee job motivation. For each point Transformational Leadership increased, employee job motivation increased by approximately 0.85 points. The research also concluded that no statistically significant relationship exists between Transformational Leadership and the moderating variables of gender, age group, and years of civilian government service.
This research focused on the non-supervisory workforce at Army Contracting Command – Warren, located in Warren, Michigan. The researcher surveyed 530 employees within this organization to determine if transformational leadership skills impact the employee’s job satisfaction. Employee’s generation, prior industry experience, and years of government contracting experience were utilized to determine if they moderate the impact of transformational leadership on job satisfaction.

The main finding was that there is a direct correlation between transformational leadership and job satisfaction. For every two points on the scale that the transformational leadership increased, job satisfaction increased by one point. There was no statistically significant difference in the scores based upon the moderating variables of generation, prior industry experience or years of government contracting experience.
Leading the Millennial Generation by Pamela Demeulenaere

The purpose of this research was to gain an understanding of the Millennial Generation’s significant differences in needs and expectations from the three other generations (Generation X, Baby Boomers, and Traditionalists) currently in the workforce within the TACOM Life Cycle Management Command (LCMC), Warren, Michigan. Findings from 275 responses supported the literature regarding the difference in importance millennials place on certain factors as compared to the other generations; however, there were also findings where there was no significant difference among the millennials and the non-millennials.

The factors that were the most important to the Millennial Generation were: having meaningful work, having opportunities for rapid career advancement, being able to obtain information quickly to speed up the completion of tasks, being offered professional development and growth opportunities, being offered paid training and tuition reimbursement, having a high degree of job security, being provided competitive compensation, and being provided competitive benefits. However, many of these factors were just as important to the non-millennial workforce. Of the 37 factors rated, the only ones that demonstrated a significant difference were having opportunities to pursue other career paths, having opportunities for rapid career advancement, being offered paid training and tuition reimbursement, being loyal to an organization, and having direct access to senior leaders.

The most enlightening aspect of this research was where the results deviated from the literature. The importance of having projects broken into discrete tasks, being provided daily or weekly performance feedback, and not being requested to work overtime were rated very low by the millennials, which was contrary to the literature. The literature also suggested that the millennials place importance on the use of social networking tools to perform their jobs. However, the millennial participants in this study rated this factor as the lowest of all of the factors being rated. The millennials valued the use of these tools as described in the open-ended questions, but not for the performance of the job.
Understanding Alignment of Trust Behaviors and Their Effect on Organizational Trust at the TACOM LCMC by Anthony Desmond

Trust is a social phenomenon that makes work within organizations easier and collaboration between organizations possible (Lane & Bachmann, 1998). Behaviors that engender trust are key components in building and maintaining organizational trust (Covey, 2006) and lead to increased perceived effectiveness and job satisfaction (Shockley-Zalabak, Morreale, & Hackman, 2010).

The purpose of this study was to determine if the presence and alignment of behaviors that build trust lead to higher levels of trust within and among organizations at the TACOM LCMC. The Covey trust behavior dendritic is a convenient breakdown of 13 behaviors that, if exhibited at a high level, engender trust between parties. These behaviors are: (a) talk straight; (b) demonstrate respect; (c) create transparency; (d) right wrongs; (e) show loyalty; (f) deliver results; (g) get better; (h) confront reality; (i) clarify expectations; (j) practice accountability; (k) listen first; (l) keep commitments; and (m) extend trust. A combination of trust theory and congruence theory indicates that high alignment of trust behaviors between parties may lead to higher levels of actual trust between the parties. The research will determine if trust-building behaviors exist in TACOM organizations, and if a high degree of alignment of those behaviors correlates to higher trust within and between organizations.

The primary objective of this research was to identify the levels of trust behaviors and the degree of alignment of these trust behaviors among LCMC organizations to determine if the alignment of these trust behaviors leads to greater levels of trust among organizations at TACOM. The primary outcome was to identify initiatives TACOM leadership can take to increase the level of trust among organizations, with resulting increases in employee initiative, open communication, information sharing and collaborative innovation, as well as reductions in transactions costs.
A perception exists in the Army that the research and development laboratories are not innovative. The lack of innovation is cited in the Army Science Board Fiscal Year 2012 Study titled The Strategic Direction for Army Science and Technology and in the Report of the Defense Science Board Task Force on Basic Research (Army Science Board, 2013) (Defense Science Board, 2012). Specifically, the Army Science Board study states, “the study found that the Army lacks a S&T strategy and investment plan to meet likely future challenges, improve the transition of technology and advanced capabilities to acquisition, seize valuable technological opportunities, and foster invention and innovation (The Strategic Direction For Army Science and Technology, 2013, p. iii)”. The Defense Science Board Task Force found, “that the overall level of innovation within DOD is falling short of what should be possible and what would be desirable (Defense Science Board Task Force on Basic Research, 2012, p. xiv).” In addition, the need for innovation was discussed by Army Senior Leaders at the Association of the United States Army (AUSA) annual meeting in October 2013. Specifically, Lieutenant General (LTG) Walker articulated the need to look at rebalancing Army science and technology (S&T) to focus on investing more in innovation so that the Army can do what it needs to do and has the tools it needs in the 2030-2040 timeframe (Association of the United States Army, 2013).

Respondents to this survey were told that “the act of innovation leads to something original that creates value,” which is a common thread in many of these definitions. Regardless of the definition, best practices in innovation processes, tools, and the physical environment are critical to the process of innovation.

The purpose of this study is to determine whether the U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC) utilizes the processes and has the tools and physical environments that effectively promote innovation. Having the tools and physical environments that promote innovation do not mean that they are effectively utilized.
Mentoring: Should TACOM have a Formal Mentoring Program? by Dianne C. Duggan

Mentoring relationships are, typically, a pairing of a junior and a senior colleague to share experiences, information, and knowledge. The actual term dates back to the Greek epic poems detailing Odysseus’ trek to Trojan War. Odysseus entrusted his advisor, Mentor, with the care of Odysseus’ son, Telemachus. Mentor was tasked with monitoring Telemachus’ studies and guiding his education and development. Just as Mentor would have been charged with overseeing the various aspects of Telemachus’ education such as reading, writing, and swordsmanship, mentoring relationships can and do happen in all aspects of life, such as at school, in church, in families and in friendships. However, for the purpose of this study, career mentoring will be addressed. From the mythological source, a mentor’s duties included guiding, teaching and advising younger associates in the ways of the world or the organization. In employment settings, the more senior or more experienced associates serve as mentors to the newer and current, but less experienced employees. Typically, the mentor teaches their mentee the culture of the organization and instills in them the values and beliefs of their employing firm.

The mentoring relationship may be formal or informal. A formal relationship is sponsored by the employing organization while informal relationships develop between individuals without corporate sponsorship. Both types of relationship have value but informal mentoring is the most common form. Informal mentoring relationships arise from work-related interactions, such as when working together on a specific project or when one person supervises the other. Two people may develop mutual respect and trust and seeks out the mentor for career planning advice or situational advice. This study centers on formal mentoring in the workplace.
This research examined the impact a 20% reduction in funding would have on CPI/LSS progress at TACOM LCMC. Additionally, the research studied if a slightly less (10%) or a slightly greater (30%) reduction has a different impact on CPI/LSS progress and if the impacts are moderated by the current state of CPI/LSS planning and implementation maturity. This research employed a mixed methodology. Quantitative and qualitative data were collected to analyze the impacts of budget cuts on CPI/LSS progress, determine the long term impacts of reductions on CPI/LSS progress, and capture mitigation actions that help reduce risks to CPI/LSS progress.

Significant findings indicate that funding reductions of 20% will have an impact on CPI/LSS progress, and there is a statistically significant difference in the impact a 10%, 20% and 30% reduction has on CPI/LSS progress. The state of maturity does not moderate the impact a reduction of 10% will have on CPI/LSS progress. However, the state of maturity does moderate the impact reductions of 20% and 30% have on CPI/LSS progress.

Qualitative research revealed leaders have already started to divest CPI/LSS resources in response to budget cuts slowing progress and reducing the amount of CPI/LSS designated staff.

The research identifies consequences of the budget cuts and mitigation actions to reduce the adverse effects of budget cuts.

The research concludes projected funding reductions will have an adverse impact on CPI/LSS progress at TACOM LCMC. The research finds future CPI/LSS progress will depend on leadership’s willingness and strategy used to support it.
The characteristics of the Army’s Future Combat System will necessitate a shift in the Army’s traditional logistics sustainment strategies to more efficient methods of support. The Future Combat System will employ a network-centric architecture, unlike any other weapon system that the Army has ever deployed. The complexity of this system requires a new logistics support strategy that is flexible enough to respond to changing conditions on the battlefield and in garrison. This effort investigates the suitability of Performance-Based Logistics as the logistics support concept for the Future Combat System. Two case studies are presented that provide evidence of the benefits that Performance-Based Logistics have provided other Department of Defense weapon systems.

Traditional logistics support concepts do not generally capitalize on commercial best practices that have been proven to improve supply chain performance. If the Army does not modernize its support practices, it risks becoming irrelevant to the support of our combat forces as combatant commanders (COCOMs) turn to the commercial marketplace for support. Although Army fighting doctrine currently employs integrated tactics, FCS is such a dramatic shift in war fighting doctrine that it is necessary to reexamine traditional Army methods of support to achieve the very high state of readiness that our defense forces require.

The paper argues that Performance-Based Logistics offers the Army the most viable option for the optimal logistics support of such a complex system and provides a series of recommendations to implement the effort. If adopted, a Performance-Based Logistics strategy will ensure that the Army’s Future Combat System will maintain acceptable operational availability rates at a reduced cost.
How telework is viewed across the workforce is a key question for leadership of government organizations since the passage of The Telework Enhancement Act of 2010. Telework has the potential to change the way that government performs its work and how its organizations are structured. Therefore, having knowledge of telework impacts, advantages, and disadvantages is critically important to Detroit Arsenal leadership.

Telework requires more than technology to be successful. Employees wishing to use telework must demonstrate they have the technology required at the off-site location. This research study is important to the leadership at the Detroit Arsenal organizations who are currently using telework as part of their routine and situational work schedules. A better understanding of how telework is received and managed is needed at the Arsenal because of its relatively recent introduction to the workforce and its impacts on management methods and personnel.

The basic findings in this research show that the impact of telework has positive influence on operational cost, productivity, and motivation of the Detroit Arsenal workforce. This is based on feedback from a Likert scale included in a survey to the workforce where the means, median and modes tended to reflect positive trends. Through the use of analysis of variance with Tukey analysis showed differences in age and leadership responsibilities significantly affected the impacts of telework on operational cost, productivity and motivation. Also, regression analysis of the data found that additional training had no significant impact on operational cost, productivity and motivation; however, only 9.8% of respondents stated they had any training beyond fundamental training.
The Joint Center for Ground Vehicles: A Case Study of DoD Organizational Transformation Using Grounded Theory by Teresa Gonda

The purpose of this action research case study was to identify key outcomes and insights of a seven year initiative within an Army Life Cycle Management Command (LCMC) in order to inform Army and DoD leadership on institutional transformation that can help lead to more affordable systems and improved efficiency. The research was conducted using multiple methods. Data were gathered using interviews of senior leaders, focus groups of chief engineer level leaders, Failure Modes and Effects Analysis, archival data, a review of the scholarly literature on organizational transformation, DoD documents, and the observations of a participant observer action researcher.

While individual leadership skills are an important factor in transforming organizations, this research suggests that if DoD wants to make significant progress in affordability and efficiency, it will take more than pushing harder on leaders to collaborate and look for efficiencies. This study indicates for collaborative behavior to occur, there needs to be three conditions: collaborative leadership, enabling mechanisms, and a supportive environment.

The case study portrays a group of organizations attempting to do just that. The vision is to create a virtual business across Program Executive Offices (PEO) of ground systems in order to support the Army and DoD in creating the right environment for efficiencies and integration. The intent is to create a collaborative ecosystem to support shared systems analysis, domain portfolio analysis, and systems of systems integration. The data supports that the concept is already starting to show results, although it is still new and under development and the transformation process is stalled and showing signs of frustration.

The results of this second order transformation suggest that how the transformation process is managed is just as important as making sure what an organization is transforming into contains the right integrative structures. The study suggests that in order for the transformation to be successful and collaborative behavior to occur, the enabling mechanisms must be collaboratively and purposefully designed.
Employee Engagement: Analyzing the Rational and Emotional Commitment of the 554th Electronic Systems Group by Todd Green

The purpose of this study was to examine the employee engagement level of the 554th Electronic Systems Group (554 ELSG) at Wright-Patterson AFB, Ohio. For several years, employee engagement has been a hot topic for corporate executives because there is mounting evidence that employee engagement correlates to individual, group, and organizational performance in the areas of productivity, retention, turnover, customer service, and loyalty (Ketter, 2008). The researcher sought to measure the level of engagement with a survey instrument used by the U.S. Merit Systems Protection Board. All civilian employees of the 554 ELSG were invited to take the survey, which consisted of five demographic, sixteen engagement-related, and two open-ended questions. The mixed method approach allowed for the collection and analysis of qualitative and quantitative data.

There were 101 respondents to the survey. The employee responses from the survey (including demographic data) were analyzed using descriptive research methods, while the qualitative data was analyzed using thematic analysis. Findings indicate 42% of 554 ELSG employee were engaged, which is nearly identical to the 41% for the overall Air Force. However, nearly one in four (23%) employees was not engaged compared to just 16% for the Air Force. Based on 554 ELSG survey responses, the core components of employee engagement needing improvement were: performance of leaders, managers, and supervisors; rewards and recognition, workload time and resources; sufficient opportunities to earn a high performance rating; making good use of skills and abilities; and meaningful work to the employees. The findings documented in this study helped identify recommendations to improve engagement in the organization and provided leaders, managers, and supervisors with a greater understanding of the impact they have on the level of employee engagement.
Today’s Army Acquisition Community focuses on the alignment of multiple systems acquired as system-of-systems packages. These systems are required to operate together to deliver the soldier a set of capabilities not possible from any single individual system. Often these individual systems are developed independently, which presents unique management challenges for the program manager required to synchronize and align the systems within the capability set. In some cases these systems working together are referred to as “Capability Packages.” Those management challenges extend to Army leaders, who are required to assess development progress of each system and as a system of systems to determine the viability to yield the desired capability within the ever-changing world environment.

This research set out to examine how systems engineering was being used to work across the interrelationships between these multiple systems and if a unique series of systems-of-systems systems engineering processes and metrics would be required to support and enhance the management of the individual systems as well as the overarching system of systems and capability packages. As this research progressed, a surprising result began to emerge from interviews: systems engineering was not being used as widely as had been expected. Even though virtually all interviewed recognized the importance of systems engineering, they shared that other higher priority acquisition challenges often arose, forcing the transition of resources from systems engineering to more immediate challenges.

Another interesting result was that oversight of a single complex acquisition effort is challenging. When looking across multiple complex systems that all must interface, the problem becomes much worse. The manage processes used to shepherd system of systems and capability package programs through the acquisition process is still evolving. Most of those interviewed felt that the systems engineering must also evolve to meet the challenge of managing these complex acquisition programs. The conclusions summarize how systems engineering could evolve to meet the challenge of managing complex acquisition efforts that include system of systems and capability package programs.
This research examined the negative effects of budget cuts on the TACOM workforce before, during, and after the drawdown of GWOT. The budget cut effects were studied in terms of the potential negative effects on the employee’s mission, co-workers, and families and confidence in leadership. Retaining employees with the critical skills needed for an effective TACOM workforce requires balancing mission, co-workers, and family during normal operations, conflicts, and war. Understanding this balance provides the foundation for effective retention policies.

A survey was sent to four organizations within the TACOM LCMC requesting participants to answer a series of questions about the effects of budget cuts before, during and after the drawdown of GWOT, and the negative effects on the employee’s mission, their co-workers, and their family.

The major findings from this research showed there were no negative effect of budget cuts before the GWOT; moderate negative effects of budget cuts during the GWOT; and significant negative effects of budget cuts after the GWOT.
The purpose of this study was to compare the current interview process for senior positions within Program Executive Office (PEO) Ground Combat Systems (GCS) and PEO Combat Support & Combat Service Support (CS&CSS) with the guidance for key leadership positions, Office of Personnel Management (OPM) guidance, and best practices in industry. These comparisons provide important insights into the strengths and weaknesses of current practices, and suggest ways to improve current practices.

This study was limited to the hiring practices of PEO GCS and PEO CS&CSS for core NH-IV (senior level) positions. Both organizations are located at the TACOM Life Cycle Management Command (LCMC) on the Detroit Arsenal in Warren, MI. At the time of the study, PEO GCS and PEO CS&CSS did not have a specific policy for hiring key leadership positions; however, each organization has similar hiring policies for core NH-IV pay band positions.

The survey was released to the entire TACOM LCMC workforce in December 2015. The workforce was instructed that the survey was intended for only NH-IV grade, or equivalent, employees. Of the 267 respondents, only 51 met the grade requirement and had participated in a core NH-IV hiring action within either PEO.

The data collected provides senior leaders a snap shot of their current core NH-IV hiring process. The survey instrument was designed to assess the current process against the key leadership position guidance, OPM guidance, and industry best practices. The results show that small changes throughout the current process will help the PEOs meet the new key leadership position guidance when hiring for those positions. The quantitative and qualitative results show that each PEO’s senior leaders are not satisfied with the current process. Each PEO needs to revamp the hiring process to account for the OPM hiring guidance and industry best practices.
Key Factors for Successful Collaboration within TACOM LCMC by Jennifer A. Hitchcock

The definitions and opinions in the TACOM LCMC vary widely on what hinders or facilitates collaboration and how it should be accomplished. Since the LCMC is a collaborative organization and collaboration is important to the LCMC’s success, this study was conducted to determine the key factors required for successful collaborations. Specifically this identifies key factors needed for successful long term collaborations within the command.

Long term collaborations are important not only because of the benefits stated above, but because the Army is undergoing significant changes in the way it does business. The Army is facing a more complex and global operating environment which will require more resources than are available. With the Global War on Terrorism, modernization, increasing requirements and diverse demands, maintaining the status quo is not an option.

This research study was conducted using exploratory research and qualitative analysis to discover the factors that are considered key to successful collaboration. Data was collected from literature and interviews.

Analysis of the data revealed 19 factors that enable successful collaborations and research shows that the appearance of each factor is needed to some degree for successful collaborations. There appear to be commonly agreed upon factors between military and industry collaborations, and factors that are different between the two sectors. There appears to be an important pattern of interdependency between some of the factors. This interdependency implies that leadership support for the collaboration, the collaborative goals and vision, personal accountability and ownership of the collaboration process, continuous communications, and the leaders of the collaboration having collaborative skills and behaviors are core factors for successful collaborations. Concentrating resources on developing these core factors will begin to build successful collaborations within the TACOM LCMC and allow for the continuous building of all the factors into the culture to create a collaborative culture.
This study assessed the ability of PMs to manage cyber security risks on ground vehicles, reviewed current Cyber Security policy, and determined if awareness of cyber risks has increased since Boyd’s study (Boyd, 2008). Innovations in autonomous vehicle systems in the commercial truck industries will migrate into Army tactical wheeled vehicles as the Army moves increasingly into autonomous tactical vehicles. The study identified how current military cyber policy impacts cyber incidents. (Rosenzweig D. I., 2014) (Rosenzweig P., 2012) Army PMs were surveyed and they perceive an increased risk using a globalized contractor and some lack the resources to implement the cyber policies. The paper recommended the Army establish an Autonomy Consortium, introduce cyber physical systems to DoDI 8500.01, and prioritize cyber requirements within the PPBE process.
The Impacts of Commercial Maintenance Technology on Army Materiel Maintenance Practices by Mitchell Kozera

The information gathered from the Integrated Logistics Analysis Program (ILAP) supports the idea that there is room for improvement in maintenance processes to improve turnaround time. The ILAP data tell that, in the months between April and September 2007, there were relatively long wait times for repair parts in Iraq. Those wait times added significantly to total turnaround time and caused Army maintainers to exceed regulation metrics for turnaround time in a combat zone. Actual repair times were, on average, significantly lower than wait time for parts. However, at different times during the sample period, repair time by itself exceeded the recommended metrics for acceptable maintenance turnaround time. This is likely attributable to maintainer workload and the fact that soldiers move to other tasks when waiting for repair parts. Also, since there is significant manual recording of work order data, it should not be ignored that some of this data could be attributable to faulty record keeping.

The Army findings certainly make a case for insertion of commercial technology that can improve maintenance turnaround time. International Truck and Engine Corporation’s AWARE™ product is in development with the intention of creating a system for International Truck’s fleet managers to increase diagnostic situational awareness and improve their maintenance processes. Their philosophy includes developing the product to help potential customers like the Army impact their truck fleet in the same way. The AWARE™ approach addresses real-life problems for maintaining readiness of vehicle systems under normal conditions and in the event of catastrophic failures. The approach also supports the philosophy that fleet managers in commercial industry and the Army alike have the same sorts of maintenance issues that impact short- and long-term success.

The use of commercial electronics and wireless communications technologies is an area that has been under investigation in many unconnected initiatives by the Army for several years. The approach that AWARE™ uses to integrate those technologies offers a reasonable and convenient way for the Army to adapt the technologies in one single solution.
The United States commercial automobile industry, especially the domestic manufacturers and their part suppliers, has declined in the past few years. The decline was drastic enough that the government provided a financial bailout to General Motors and Chrysler. The manufacturers that build military tactical vehicles share much of the same automotive parts supplier base used in commercial automotive and truck sectors. Consequently, the supplier decline could impact the ability of tactical vehicle Original Equipment Manufacturers (OEMs) to produce tactical vehicles. The decline in suppliers could impact cost, quality, technology innovation, and delivery of military tactical vehicles. The purpose of this research is to determine and assess the impacts of the decline in the US automotive industry on automobile suppliers that serve both the commercial and tactical vehicle market, and consequent impacts on cost, quality, technology, and delivery of tactical vehicles. This paper also assesses the national security risks created by the decline in US automobile industry suppliers.

The outcome of the study informs the Army’s Tactical Vehicle Program Managers, and the Program Executive Officer, Combat Support and Combat Service Support of the impacts of the declining automotive supplier industry on their tactical vehicle programs.
Ever since the end of World War II, when the US dropped the atomic bomb on Japan, the US has maintained the most technologically superior military in the world. However, today’s military faces an unimaginable number of threats, which drives the speed of technology at reckless abandon. In 1983, Secretary of Defense Caspar Weinberger had the vision that the US was in danger of losing this technological leverage. He stated that the US needed to start developing new military technologies, which would not be seen for years. He saw a need to restore the relationships between the DoD, academia, laboratories, and industry.

However, there are problems transitioning technology. In one case, after a successful EMIP, the Project Manager for the Joint Combat Support Systems had neither funding nor permission to (1) Expeditiously Send Technology to Theater for Test nor (2) link technology to a current acquisition program. Furthermore, nearly all Project Managers and Product Managers have a 3% budget allocation for New Technology Development; however, the program office engineers are already overloaded with new technology projects, and new technologies are usually the first source for budget cuts.

This research recommends: (1) high level sponsorship through a new TACOM LCMC Technology Transition Office, (2) synchronization and collaboration among TACOM LCMC Organizations, plus DAU Technology Transition Training, (3) linking technology to specific requirements through Requirements Generation Software, and (4) changing the funding for Technology Transition with the S&T Organization funding Basic Research and the program office funding Technology Transition.
Technology and war fighting strategy are changing rapidly, but military ground vehicles are being used for longer lengths of time in service. The integration of emerging technology on to existing or new platforms will dominate current and future military vehicle designs, creating possible system level negative effects and high risks from the technology integration. Currently, some Department of Defense (DoD) agencies are recommending the use of Integration Readiness Assessments early in the program. But what are they? Is DoD effectively using processes to identify and analyze integration risks early in the design phase?

This research explored methods the Army and Marine Corps currently use to assess integration risks, then interviewed several lead system engineers and program managers to report how they are analyzing these integration risks and if there are needs and available resources for further integration assessments.
The insertion of new technology in current and future military vehicle systems is of paramount importance. To do it faster and at less cost and more efficiently is equally important. The capacity to incrementally and rapidly insert new and more reliable technology at the component level as it becomes available in commercial (and international) ventures are key concepts to reducing Life Cycle Management Cost (LCMC) and improving supportability issues (Reliability, Supportability and Maintainability), especially in our legacy vehicles. This is also true for improving safety and survivability systems, advancing distribution and mission enhancement, and improving interoperability and operational capability. When the “Cold War” was won, budgets were expected to and did shrink. Acquisition Reform Initiatives were introduced to address this dilemma of shrinking budget outlays. Essentially, the purpose and aims were to insert new technology faster, better and cheaper. The method was to identify and leverage Industry’s investment in commercial technology without resorting to military Specifications and lengthy developmental efforts. Commercial-off-the-Shelf (COTS), Non Developmental Item (NDI), Military-off-the Shelf (MOTS), Opens System Architecture and other concepts were introduced. It has now been twelve plus years since Acquisition Reform initiatives were introduced. Despite the Greater War on Terrorism (GWOT), and recent expanded budgets the situation remains much the same. Budget outlays are again expected to decrease no matter who wins congress or the white house.

The primary research questions are: (1) What methods or initiatives have been successful and are positively viewed or accepted as valid practices in improving technology insertion? (2) What enabling strategies have been identified and accepted? (3) Which methods or Initiatives have been used but have not been successful or widely accepted? and (4) What impediments or barriers to implementation of Technology Insertion have been encountered?
The purpose of this research was to understand how Transitions of ground vehicle systems to Sustainment are managed at the TACOM LCMC, Warren Michigan. The management of the transition to sustainment for ground vehicle systems has been growing in importance as the wars in Iraq and Afghanistan have wound down. The goal of this research was to evaluate current management processes across the organization to prepare for future challenges as the number of systems that transition to sustainment grows.

This research used a mixed methods process that included a review of literature and a survey that was distributed to the workforces located in the PEOs and the TACOM LCMC. The survey asked demographic questions and questions about processes, obstacles, roles and responsibilities, leadership, and communications that are followed, recognized, and observed as transition to sustainment plans are developed and put into action. The data gathered from the survey was analyzed using descriptive statistics for correlations among the data collected, and to analyze items that were grouped into elements. The data analyses also included evaluation of participant responses to each survey question to understand and describe their perceptions of the management of transition to sustainment.

The conclusions from the data analyses were that the management of Transitions to Sustainment is not efficient or being managed in ways that will become efficient.

There are three areas that need to be addressed to improve the management of transition to sustainment: develop or update outdated guidance that addresses transition to sustainment; adjust resource plans to provide technical expertise during and after T2S occurs; and improve communications across the organizations at TACOM LCMC.
The purpose of this research is to see if the employees at TACOM LCMC agree that their leaders possess the skills, as identified in this research paper, needed to lead the organization in the 21st century. The survey was sent to 1200 employees. Since the minimum sample to ensure a 95% confidence level was 292, the survey was sent to 300 employees of the four organization listed above. The researcher received 381 responses of which 373 were complete responses that met the criteria for the study. This represented a 31% return of completed surveys that met all the research criteria. Of the four organizations surveyed, the largest return was from PEO CS & CSS with 141 (38%) responding. The ILSC was next with 97 (26%) responding followed by the TARDEC and PEO GCS with 72 (19%) and 63 (17%) respectively.

The skills evaluated were vision, integrity, mentoring, communication, delegation, emotional intelligence, change management, rewards, time management, and teaming. The evaluations were conducted in total, by organization, gender, experience and education level. All evaluated data was validated with the personnel department at the TACOM LCMC to ensure it was representative of the four organizations surveyed. The responses were statistically representative of each organization as a whole.

The responses from each organization for each of the 45 questions were more often than not positive. Overall, each organization rated their leaders positively stating that they agree that their leaders have the skills needed to lead their organization in the 21st century. The average positive response rate was in excess of 70% for each skill evaluated. However, the TACOM LCMC will need to address the 20%-30% negative response rate for some of the organizations.

The skills ranking section of the survey clearly and consistently showed that the top three skills that the employees believe their leaders need in the 21st century are Change Management, Mentoring and Vision. Additionally, leaders must be able to lead an organization through change and they must be able to groom their successor to someday lead the organization.
Dismounted Soldier Equipment – Novel Concepts and Technologies to Reduce the Weight Burden of Body Armor Material by Cassandra C. Maxwell

Since the time of the Pharaohs, body armor, although crude, has been used to protect the Warfighter during times of war. From the deserts of ancient Egypt to the modern day War on Terrorism, body armor is still being used to increase the survivability of the Warfighter. The use of body armor doesn’t come without its pitfalls however. It is heavy and expensive, so in ancient times it, was only used for the very elite and the wealthy. Today body armor is standard issued equipment for all soldiers on the battlefield, but weight issues continue to plague the Warfighter. In this research paper we will explore new and emerging body armor materials that will reduced the weight burden of today’s Warfighter.

The purpose of this research is to identify new or emerging body armor materials that will reduce the weight burden of the soldier’s protective vest. The weight of the Warfighter’s equipment has been a concern for many years, and initiatives to reduce the weight of the equipment are ongoing. This research will more narrowly focus on soldiers’ body armor or the soldiers’ protective vest and new or emerging body armor materials that will reduce the weight burden to the soldier. The primary research question is: Are there new or emerging body armor materials that will reduce the weight of the soldier’s protective vest?
The purpose of this research is to gain an understanding of how well the Detroit Arsenal and its organizations are managing the knowledge that is possessed by its associates. Globalization is rapidly changing the way we communicate, utilize knowledge and remain competitive within the world. It is crucial for one to understand the maturity of an organization and how it ranks in Knowledge Management (KM) culture, strategy, competence and metrics to effectively lead the organization into utilizing and sharing its collective knowledge to the maximum extent possible. The Knowledge Management Institute’s model for maturity was used to develop a survey instrument that concentrated on the four principles of effective KM: culture, strategy, competence, and metrics. This survey instrument utilized the Survey Monkey application and received 437 responses out of a population of 5,988 associates at the Detroit Arsenal. Through this research and analysis of the data, each organization was measured and compared regarding how well their KM strategies are being implemented.

The research determined that there was statistical significance in terms of how each organization viewed itself in terms of KM maturity. It further identified the maturity of each organization at the Detroit Arsenal and the TACOM LCMC as a whole. Most organizations ranked in terms of KM maturity between 2 (indicating there is sharing within parts of the organization and KM strategies and champions are emerging) and 3 (indicating that sharing is being completed, a KM plan and strategy are in place and champions are leading initiatives) on a 5 point scale.

An organization’s leadership and associates can use these results to modify their approaches to effectively implement a KM strategy. The research concluded with recommendations in terms of how each organization and the TACOM LCMC can implement KM initiatives to effectively improve their maturity and their efficiency in managing their knowledge.
Leading a Distributed Workforce: Virtual Leadership by Christopher Miles

How to build an effective team is one of the most significant leadership questions of the day. Virtual teams drive an all-encompassing and important decision-making process in a broad range of organizations and in all sectors of the economy. Gaining a better understanding of how to lead virtual teams is of critical importance to TACOM leadership.

This research study is important to both industry and government organizations that are currently using virtual teams. A better understanding of how virtual teams are managed and led is needed at TACOM because of the complex products that are generated and deployed utilizing multidisciplinary teams. The intent is that this study will provide empirical evidence to determine whether the leadership skills needed to lead a virtual team are the same as the skills needed to lead traditional teams. The knowledge gained from this research will benefit the TACOM Acquisition Workforce, other government and private organizations in general. This may lead to better team management and a more effective use of virtual teams.

The basic findings in this research show that leadership skills of virtual teams are a crucial component in that teams effectiveness. However, when compared to leaders of traditional teams, virtual team leaders face the following difficulties: (a) logistical problems, including coordinating work across different time zones and physical distances; (b) interpersonal issues, including an ability to establish effective working relationship in the absence of frequent face-to-face communication; and (c) technological difficulties. Considerable research was conducted, which included interviews with current team leaders and the analysis of 500 surveys of various TACOM employees. There were a number of key themes which emerged that contributed to effective virtual team leadership; clear communication, trust among team members, setting of goals and objectives, and understanding that every team is different.
Successful organizations have ventured beyond their native boundaries to become global leaders in their market segment. Most have ventured to simply expand their exports, yet others have collaborated with international partners to further improve their products and capabilities. Specifically, Southeastern Michigan is the center of the global automotive industry. The largest automaker headquarters of the United States and Canada, Ford, General Motors and Chrysler, are centrally located in this region to include the major influence of the U.S. Environmental Protection Agency (EPA) on the industry. These corporations are considered large global institutions that use international collaboration to improve their advantage in the capture of a larger global market share.

The US Army is also a global institution that has policies and offices to support international collaboration to improve their program performance. Therefore, program/product/project managers at the Tank-Automotive and Armaments Command Life Cycle Management Command (TACOM LCMC) in Southeast Michigan should also use international coloration to improve program performance. The potential for program efficiency gains, product improvements and increased customer satisfaction have made this an attractive venture for most industries. However, implementation of international collaboration has proven to be difficult, and results have been mixed within defense acquisition programs.

This paper will investigate the extent to which acquisition professionals use international collaboration (IC); the perceived impact of IC on program performance; and the perceived impacts parent and external organizations have on international collaborations. Developed from a literature review that includes Department of Defense instructions and policies, a voluntary survey was distributed to the acquisition professionals of the TACOM LCMC. The analysis indicates that most acquisition professionals do not use international collaboration and that international collaboration does not impact program performance.
Army Acquisition Manager Challenges with Existing Laws, Regulations and Policies governing Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation by Andrew Orlando

The cost to develop, procure, and sustain major weapon systems in the DOD has increased by almost $300B under the current DFARS policy and performance based acquisition (PBA) strategies. According to a United States Senate Committee on Armed Services letter dated 7 November 2008 from Senators Carl Levin and John McCain to the Honorable Robert Gates Secretary of Defense, “nearly half of DOD’s 95 largest acquisition programs have exceeded the so-called ‘Nunn-McCurdy’ cost growth standards established by Congress to identify seriously troubled programs.” Congress, along with DOD, must make some simple changes to its procurement laws, acquisition strategies, policies, and regulations as levied in DFARS to maintain costs and meet the materiel demands of its forces.

This study focused on the Department of the Army (DA), an agency under the DOD, and existing challenges faced by Army program managers due to rights in noncommercial computer software. PMs are charged with the total systems acquisition of major weapons systems that today include software development, sustainment, and reuse issues. The purpose of this study was to determine if a relationship existed between rights in noncommercial computer software developed for the Army and measures of effective technology transition reporting as governed by current U.S. Laws and Federal Regulations guiding Army contracts. This study resulted in a series of recommendations to effectively control costs, meet schedules, and improve technology transition. The first step was to identify if any assessment measures existed relative to current intellectual property and technology transfer laws. The second step was to determine if there was a benefit to the U.S. economy or detriment to weapon systems costs. The third step was to develop viable options to reduce overall lifecycle software costs for weapon systems.
The purpose of this research was to determine if the TACOM LCMC Sustainment Systems Technical Support (SSTS) Operation Maintenance Army (OMA) Requirements Tracking System (TORTS) process used to develop, prioritize, and approve contract and project requirements was also used to identify low priority (includes excess capability not relevant and taking risk for early divestiture of systems) weapons systems that could be divested. This research employed a mixed quantitative and qualitative research questions. TACOM LCMC personnel in Warren, Michigan were surveyed resulting in a sample size of 102 respondents. The survey collected quantitative data to determine the extent to which TORTS was used to identify systems that could be divested. The survey also included two open-ended questions that captured qualitative information on obstacles and advantages/disadvantages of using TORTS, and on other systems.

The results indicated that ILSC and PEO GCS were the only two organizations committed to using TORTS to identify systems that can be divested. DA policy rated the highest mean surveyed indicating that DA policy was the most primary reason chosen by respondents as why TORTS was not used to identify low priority systems that could be divested. Results indicated numerous processes/programs in place now that can be used to identify low priority systems for divestiture and that programs should be reviewed for relevance and affordability and TORTS provided the advantage to review low priority sustainment systems for divestiture. Recommend that TACOM LCMC leadership place greater emphasis on participation in TORTS by all organizations; disseminate what processes or programs that are currently being used by DA to identify systems for divestiture to the TACOM LCMC community and leverage TORTS to provide a TACOM LCMC consolidated list of candidate systems for divestiture to the DA on a regular basis.
Globalization has changed the landscape of semiconductor production from a U.S. dominated industry to an Asian dominated industry. First, Japan was able to surpass the U.S. in semiconductor production in 1986. As globalization of the semiconductor industry continued in the 1990s, Korea, Taiwan, and Singapore began to gain market share, with China emerging as a dominant force in the 2000s for semiconductor production. Next, Taiwan and China built a market that now accounts for nearly three-quarters of microchip production. The U.S. now produces only about 20% of all computer chips and 25% of the most advanced technology chips.

This shift to foreign production of semiconductors may have created significant risk to DoD weapon systems. The risks are: counterfeit chips, introduction of Trojan Horses, inability to maintain supply of critical parts during times of crisis, and the inability to assure design function without compromise. Today’s weapon systems like aircraft, missiles, and radars are highly dependent on their computing capabilities. The potential risk from suspect or defective semiconductors may cause weapons to fail in times of crisis or secretly corrupt crucial data. The problem has grown more severe as most American semiconductor manufacturing plants move offshore. Trends indicate that semiconductor design and production will become more globalized and risk mitigation strategies will become more difficult to implement.

This study assesses USAF program management awareness of trusted foundry facilities, congressional requirements, and steps to utilize a trusted foundry for semiconductor needs. This study also defines the effects of globalization on the semiconductor industry and its associated risks to the DoD weapon systems. The results of this study will assist the USAF in determining the need for training and education about the risks associated with semiconductors used with weapons platforms and the availability of programs capable of assisting them in meeting congressionally mandated requirements. In addition, it can assist program managers in becoming pro-active in managing semiconductor risks which in turn will prevent impact to weapon system operations.
Technology transition in the DoD refers to how technology that is developed in the Science and Technology (S&T) community progresses into weapon systems that the warfighter uses. The S&T funding is divided into three areas for developing technology: basic research, applied research, and advance technology development. Technology progresses through these areas before transitioning to an acquisition program that further develops the technology for use in the weapon system. There are exceptions where the S&T community starts working technologies at a later stage, such as the applied research stage. This depends on how advanced the technology was when DoD started working on it.

Weapon system acquisitions have problems with technology development. The impact is the weapon system acquisition costs go up and delivery of the system is delayed from months to several years. The goal is to have a weapon system acquisition with minimal impacts from technology development. Development planning has been reinstituted by Congress to help with this problem. There is potential synergy for the S&T community and development planning to provide an understanding of technology availability and maturity early in the acquisition lifecycle.

Technology transition has been a challenge whether technology sits on the shelf or is pushed prematurely into a weapon system. The revitalization of the development planning approach early in the acquisition lifecycle potentially could lead to more successful technology transitions to the warfighter and communication back to the S&T community on what technologies need to be developed for weapon systems. The strategy is to get the communication of capability requirements flowing both ways, between the S&T and acquisition communities, on technology needs and capabilities that can meet the weapon system requirements and keep the program on schedule and cost. This study explores whether development planning can bridge the gap between weapon system acquisition and S&T technology transition to the warfighter.
Understanding Organizational Commitment and Satisfaction of TACOM LCMC AT&L Associates by Nancy Saxon

This study focused on the job satisfaction and organizational commitment of civil service workers employed at the U.S. Army Tank Automotive Command (TACOM) located in Warren, Michigan. TACOM employs 6,739 employees in Warren with a wide range of acquisition skills. The purpose of this study is to compare the levels of job satisfaction and organizational commitment among Acquisition, Technology, and Logistics (AT&L) associates at TACOM hired within the last five years, with and without private industry experience.

This mixed method research study examined the factors that correlate to job satisfaction and organizational commitment, and identified potential new factors that may be important to the AT&L workforce. Maslow’s motivational theory, the factors of: Relevance or Meaning of the Job, Growth and Development Opportunities, Supervisor Support/Satisfaction, Feelings Toward Co-Workers, Job Security, Pay, and Benefits, provided the theoretical framework for the study. Because job satisfaction and organizational commitment are critical to retaining employees, understanding the factors that contribute to satisfaction and commitment provides the foundation for effective retention policies.

The findings of the research show that elements of normative and affective commitment are being perceived differently by those employees with and without private industry experience. Additional findings show that factors such as pay, benefits, growth and development opportunities, relevance or meaning of the job, and job security affect the levels of job satisfaction for those with and without private industry experience differ significantly.

The research survey contained seven open-ended questions which were coded by the researcher into several significant factors. The meaning or relevance of the job appeared to be the single most important factor in determining both job satisfaction and organizational commitment. There were new factors revealed from the qualitative question on what TACOM could do to improve job satisfaction. Some of these new ideas were to increase accountability of fellow associates, increase the number of warfighter visits, and control wastefulness.
An Investigation of Collaborative Leadership by Keith Schweizer

This research explored and measured the collaborative leadership style that currently exists at the Tank-Automotive Command (TACOM) Life Cycle Management Command (LCMC). It will also look at collaboration barriers and collaborative opportunities.

The four main questions answered by this research are:

1. What is the current collaborative leadership style among organizations at the TACOM LCMC?
2. Is there a difference in perception of collaborative leadership style between the workforce and leadership?
3. What opportunities exist to make collaboration more valuable at TACOM LCMC?
4. What are the barriers that diminish the value of collaboration at TACOM LCMC?

Research has shown if an organization wishes to maximize time, talent, and tools to create value, it requires the culture of collaboration (Rosen, 2007). Aligning organizational strengths, combined with the right skills, will create efficiency. Additionally, strong collaborative skills increase natural enthusiasm across an entire organization and leverage effectiveness of all relationships, supporting a healthy environment that is accepting to change, shared decisions, creative problem solving, and more trust across the organization (Tamm, Luyet, 2004). Research has also shown that a balanced approach may be an appropriate path in that not all collaboration creates value. Specific collaboration barriers and opportunities can be targets that produce the most benefit. (Hansen 2009)

The study was conducted using quantitative and qualitative research to identify and assess the collaborative leadership styles at TACOM LCMC. Data were collected via a survey and personal interviews. The level of collaborative leadership was measured, barriers were identified, and recommendations of opportunities to increase the effectiveness of collaboration were documented.
Utilizing effective recruiting practices is essential to obtaining qualified people in today’s competitive market for skilled employees. The quest to attract top talent for an organization is a major concern for both private and public entities. It is extremely important to ensure that the skills and competencies each person brings to an organization are optimal, especially in times of downsizing when the staff is lean and a company has to do more with less. Organizations also want to avoid the financial expense of hiring the wrong candidate.

This study was designed to determine the extent to which recruiting practices identified in the literature are utilized by the major organizations located at the TACOM LCMC in Warren, MI, to determine the satisfaction with current recruiting practices, and to make recommendations for accelerating the adoption of best recruiting practices at the TACOM LCMC. This study utilized a mixed method survey to gauge both utilization and satisfaction within various steps of the recruiting process at the TACOM LCMC. Recommendations from the findings include ensuring that a policy is in place, is readily available for all to review, and is reviewed and updated on a regular basis. Other recommendations were taking advantage of any training opportunity or help that is offered and available to include the OPM website; researching incentives that could be offered; taking steps to ensure that USA JOBS is more readily understood and easier for applicants to apply; and communicating to the workforce when new job openings are posted and post recurring status of the position. Suggested additional research on recruiting practices include concentrating on one organization throughout the multi-step process or interviewing new hires to ask their opinion of their recruiting experience.
The Impact of Authentic Leadership on Ethical Behavior by Leland “Kent” Shea

The Department of Defense makes improved ethical behavior and decision making an annual priority within its military, civilian, and contracted workforce. Research indicates that leadership, particularly authentic leadership, can have a positive impact on improving the ethical behavior and decision making of employees. This study included a quantitative survey design with moderating variables to explore the level of authentic leadership practiced and its impact on ethical behavior on 342 employees from the Detroit Arsenal located in Warren, Michigan.

The elements that support the theoretical makeup of authentic leadership as supported in the literature were examined—transparency, moral/ethical, balanced processing, and self-awareness—as well as the impact of authentic leadership on ethical behavior across organizations. Additionally, the relationship between authentic leadership and ethical behavior was tested for its moderation by gender, pay grade, and educational level.

The results indicated no significant correlation between authentic leadership and ethical behavior for this population. There were also no significant differences found in this relationship with regards to organization. Additionally, no moderation effect was found for any of the variables.

Three recommendations for Detroit Arsenal senior leaders are suggested from this study. First, make formal authentic leadership training available to subordinate leaders. Second, modify the approach to formal ethics training. Finally, emphasize ethical behavior routinely in both formal and informal communications with the workforce.
Effective delegation is an essential component of a manager’s job. It is a critical leadership skill for improving the efficiency and motivation of supervisors and employees. This study examines delegation practices by senior leaders at TACOM LCMC. A significant part of the project examined why leaders do not delegate and the extent to which these practices exist within the TACOM LCMC community. The research is important because it underscores and reinforces the critical role delegation plays in the success of organizations. The findings are based on surveying civilian (GS-14 and above) and military leaders (Lieutenant Colonel and above). The methodology used to collect data for this research was mixed methodology consisting of both quantitative and qualitative approaches.

The data were collected through a survey to 710 participants at the TACOM LCMC. The main findings from the research were 70% of senior leaders responded that they *routinely* delegate and 20% responding that they delegate *often*. The remaining 10% was split among *sometimes*, *rarely*, and *not at all*. The factor rated highest by senior leaders when considering delegating responsibilities was that the responsibility fell within the employee’s job duties. When leaders chose not to delegate, key reasons cited were too much up front work, prior bad experience, guilt of increasing subordinates workload, and too much monitoring required. Only “bad experience” showed a statistical difference between those leaders having 31-45 direct reporting employees, and those with over 45 direct reports. The research findings also show that the method of delegation (e-mail, telephone, face to face, and 3rd party stakeholder) does not have a statistically significant impact on leaders’ motivation to delegate.
Most effective commercial entities are always looking at better maintenance practices to lower the Life Cycle Cost (LCC) of their equipment. Maintenance costs are the second highest cost after vehicle operations. Commercial entities use Reliability Centered Maintenance (RCM) and Condition Based Maintenance (CBM) as their best maintenance practices to prolong the time to overhaul their equipment, because overhauling reduces the LCC and extends the life of the fleet.

Utilizing RCM correctly can eliminate unnecessary maintenance or overhauls, reduce equipment failures, focus maintenance activities on critical components, incorporate root cause analysis, and increase component reliability. CBM assesses the system’s condition based on data collected through continuous monitoring or inspections. CBM has proven to minimize the cost of maintenance and reduce the quantity of services.

This research is intended to determine the extent to which the TACOM LCMC uses RCM and CBM, which lower the LCC and extend the LC of the ground vehicle fleet. The research also looks to the extent to which TACOM LCMC shares information once the system is inducted into the rebuild/recapitalization program. LCC is the total cost to the government over the weapon system’s full life. This includes but is not limited to research, development, support equipment (hardware and software), initial inventory, training, operating support, and demilitarization.

The research revealed that TACOM LCMC used RCM and CBM occasionally when developing maintenance practices for their systems. This indicates room for improvement when using RCM and CBM. It also found that TACOM LCMC is slightly knowledgeable of RCM and moderately knowledgeable of CBM, illustrating a gap in knowledge and room for improvement. Lastly, around 50% of participants received information when the system was inducted and completed into a rebuild/recapitalization program, and only 35% received information on the total cost of repairs. This generates an issue which affects the ability to adjust the projected cost of repairs and the actual cost when managing the LCC. The lack of information sharing also constitutes an issue for the system managers to determine if they are on schedule.
This research examined the impacts of the FY13 Furlough on the Army Acquisition Workforce within the TACOM-LCMC community. It tested two hypotheses: (1) the number of Acquisition Workforce hours lost during the period of furlough is the same as the reduction of hours directed by the SECDEF and (2) the productivity of the Acquisition Workforce during the period of furlough is equal to pre-furlough levels.

A survey was sent to members of the TACOM-LCMC community asking them a series of questions regarding the effects of the FY13 Furlough on their level of effort and productivity during the periods before the furlough was announced, when it was announced but not implemented, when it was implemented, and the immediate 90 days after the furlough. From this community, 1,132 people participated in the research survey.

The major findings from this research show that while there was a small increase in the level of effort during the period when the furlough was announced, the level of effort decreased once the furlough was implemented. There was also an accompanying decrease in productivity. However, in the 90 days immediately after the furlough, the workforce’s productivity returned to its pre-furlough level.
The Army, a long-trusted institution by the nation, exists to serve the Nation. As part of the Department of Defense’s joint force, the Army supports and defends America’s Constitution and the American way of life against all enemies, foreign and domestic. The Army protects America’s national security interests, including forces, possessions, citizens, allies, and friends. It prepares for and delivers decisive military action in all operations. Above all, the Army provides combatant commanders with versatile land forces ready to fight and win the Nation’s wars. The Army accomplishes this mission as a part of the overall joint force including the Air Force, the Marines and the Navy.

This research report analyzed the impact of the Army’s conversion to the Brigade based Modular Force Structure and its conversion of the maintenance doctrine. Both changes represented the most dramatic change to take place to the Army in 60 years. The research report consisted of a questionnaire sent to Heavy Brigade Commanders, the three Combined Arms Battalion commanders in each Brigade and the Brigade Maintenance Technician. The second part of this research report centered on the OSMIS database to gain actual cost data used in the Army today.

The HBCT structure was selected because of the amount of maintenance required daily in this formation by soldiers to maintain readiness. Stryker Brigades were not considered because of the large amount of contract logistic support used in those formations. The Bradley A3 Fighting Vehicle was selected for the cost study because of all the modern platforms in the HBCT formation, the A3 has remained the most consistent in its design during the last ten years of its operational life.
Successful companies are embracing the fact that globalization has arrived. Globalization plays a major role in a company’s success. There are many key success factors organizations must employ for “going global.” An effective partnership between all the stakeholders is viewed as essential, as is networking and relationship building skills. Understanding culture, societal norms, and expectations all over the world are skills today’s leaders require, since understanding multiple perspectives in various communities is necessary for a leader’s success. Global understanding will facilitate broadening of the organization’s knowledge to understand not only different cultures, but also the global context in which organizations like the US Army operate today. Possessing a global mindset encompasses the geographical reach of business operations, as well as the cultural and intellectual aspects of the organization. Execution of these skills in the global context is the challenge for any leader.

The primary purpose of this study is to provide an assessment of how TACOM LCMC hires, retains, and prepares future leaders for the success of the organization. This goal of this research is to determine the essential soft skills of successful global senior civilian leaders based upon current literature.

As a first step in this assessment, this study will identify the key documented requirements for civilian leadership at TACOM. This assessment will include comparing these requirements with current core competencies that are used to qualify and rate performance of senior leaders in the Army. Seven performance elements for an SES were identified during the literature review. Interviews were then conducted to determine which skills are viewed as most critical for the success of senior leaders at TACOM.
An Investigation of Climate, Behaviors and Culture and Their Effects on Organizational Innovation at TARDEC by Marta Tomkiw

Innovation is a form of change that provides value to a person, organization, or company. Decades of research shows innovation is most often seen in organizations where the climate, employee behavior, and organizational culture enable innovation to occur. Organizational climate, employee behavior, and organizational culture may also act as barriers to innovation. The purpose of this research is to determine the extent to which current organizational climate, behavior, and the culture at United States Army Tank-Automotive Research Development and Engineering Center (TARDEC) promotes innovation. It will identify existing barriers and opportunities based on prior research conducted over the last 50 years on the effects of organization climate, behavior, and organizational culture on innovation. The three main questions answered by this research were (1) To what extent does TARDEC have an organizational climate conducive to innovation? (2) To what extent is employee behavior at TARDEC conducive to innovation? and (3) To what extent does TARDEC have an organizational culture that is conducive to innovation?

Research indicates an organization is motivated to innovate if it places an explicit value on innovation. Such organizations are oriented toward risk taking rather than maintaining the status quo. Innovative organizations take a proactive approach to change, recognize employees’ capabilities, give them opportunities to be creative, collaborate through open communication, and encourage diversity in teaming. They take risks and allow employees to fail as a part of the innovation process, viewing each failure as an opportunity to learn.

The primary issue is whether TARDEC’s organizational climate, employee behaviors, and organization culture promote the innovation needed to meet the challenges of the battle field of the future. This survey captured the perceptions of 110 TARDEC Associates representing all professional career fields on the importance their organizations place on innovation, their view of the current climate for innovation, and the impacts of their personal behavior on innovation. Lastly, the survey gathers perceptions of organizational culture within the laboratory in support of organizational priorities and decision making that promote innovation.
The Department of Defense (DoD) has long provided leadership training to its military officers and enlisted corps through the use of professional military training programs. These training events and programs are typically structured to occur at various points along a career continuum, from first accession until retirement from service. Civilian members of the DoD, however, have not historically been afforded the same opportunities to develop their leadership skills. This research study attempts to look at a discrete slice of this issue and determine if non-supervisory civilian employees of the Defense Contract Management Agency (DCMA) and their supervisors believe that the non-supervisors would be more effective in their job duties if they were afforded the opportunity to receive leadership training before they join the supervisory ranks.

The researcher surveyed both supervisors and non-supervisors at DCMA to gather their views on three research questions. First, do DCMA employees who are non-supervisors see a need for leadership training to be fully effective in their current and/or future duties? Second, do DCMA supervisors see a need for non-supervisors to complete leadership training for effectiveness in their current and/or future duties? Third, does a higher level of previous leadership training by the participant result in more support for leadership training for others?

The researcher also reviewed current practices within DoD, among the military services and several other DoD agencies to determine what training opportunities are available to their civilian employees. The study supported the desire for civilian employees to receive leadership training before becoming supervisors. DCMA should examine the offerings of the other DoD agencies and determine how best to make this training available to its employees.
The Current U.S. Policy Concerning the Use of Weapon Systems, Munitions & Lasers by U.S. Special Operations Command in their Joint Operational Environment by Steve Turpen

This research paper is limited by DOD Statement Distribution F. Further dissemination only as directed by USSOCOM & OUSD(AT&L) (03/07/2011) or higher DOD authority.
Weapon Systems Acquisition at Aeronautical Systems Center: Are We Prepared to be Successful? by Stephen Ward

This research examines the criteria used to select personnel for program offices charged with the responsibility for preparing the documentation necessary for soliciting of competitive bids for future weapon systems at the Air Force Aeronautical Systems Center (ASC). The paper addresses the question: What are the competencies required for those selected to write Requests For Proposal for competitive acquisitions for the United States Air Force?

Employees with the right competencies are the key to ensure RFPs written at ASC are of the highest quality possible to enable successful competitive procurements and successful award of contracts to get necessary equipment developed, produced, and delivered to the warfighter in a reasonable time frame. ASC must do whatever is necessary to ensure high quality and consistency of the bid solicitations before they are released to obtain bids. The results of this study will provide actionable recommendations for policies and processes for the selection of personnel that are fully prepared and able to develop high quality RFPs, leading to successful contract awards.
Succession Planning for TACOM LCMC by Deborah Washer

There is a need for Succession Planning at the TACOM LCMC, which will be undergoing a major transformation in the next few years as many missions, functions and positions will transfer in and out of the command due to impending retirements and as a result of 2005 Base Realignment and Closure decisions. The main research question for this research is: What is the best framework for common succession planning that will help meet the TACOM LCMC goal of continuing to build and support the desired workforce with the knowledge, skills, and abilities to meet the needs of the TACOM LCMC? A common succession planning framework for the entire TACOM LCMC enterprise is needed to provide the workforce with leaders that are prepared to move the organization forward to continue to meet the Army mission in the ever changing global environment.

Qualitative descriptive research was conducted to discover the steps and elements that are considered key to effective succession planning. A thorough literature review was completed and included a comparison of illustrations of different agencies identified as having effective succession planning processes. Open ended interview questions and follow on interview discussions were conducted with five key leaders who represent the five core functions of the command: Technology, Staff Support, Acquisition, Logistics, and Contracting.

The following themes were identified from the data as being best factors or key elements based on the literature review and the interview guides: align with strategy; identify key positions; identify competencies and skills; assess and develop talent; and evaluate and measure. The common framework for TACOM LCMC succession planning includes People Skills, Business Intellect and Education. There are many tools and resources available within this framework for the TACOM LCMC to build an effective succession planning program.

Today the focus for succession planning is on the development of an organization’s human capital and aligning it with the strategic mission, which for the TACOM LCMC is the ultimate support to war fighter. Developing the right leaders with the right skills at the right time, and having them in the right place is the key to succession planning.
Factors in Purchasing Technical Data Rights for Military Equipment by Belinda Watts-Horton

A critical element in the life cycle of a weapon system is the availability of the item’s technical data, recorded information used to define a design and to produce, support, maintain, or operate the item. Because a weapon system may remain in the defense inventory for decades following initial acquisition, technical data decisions made during acquisition can have far-reaching implications over its life cycle. This research will examine the adequacy of current DoD policies, Army Regulations, understanding regarding access to technical data rights versus delivery of technical data rights. This study has practical applications. The purpose is to suggest strategies, training, and decision matrixes in determining technical data required for long term sustainment Army support.
TACOM is responsible for fielding and supporting one of the largest ground combat forces in the world. One of the key elements to supporting this large mechanized force is fuel, specifically fossil fuel. The continued use of fossil fuel is a worldwide concern, stemming from both availability and environmental impact. Research scientists are developing alternative energy sources, including alternative fuels for use in automobiles.

The choices these research scientists make could have a huge impact on how TACOM, or the Army, conducts and supports military operations, so it is important to understand the decision process. This research evaluated the factors research scientists felt were most important and then compared these rankings to those of TACOM’s logisticians. A divergence of importance could indicate that the research scientists’ decisions might lead to large, wholesale changes for our combat and tactical systems and may even have changed how we conduct operations.

The results did not show a divergence of decision-making factors. This is encouraging and should indicate that changing to a replacement fuel should be a smooth transition. The research also indicates that initial transition for the commercial consumer could be as soon as 5 years. This relatively quick transition may prompt a transition of the government beyond what has already taken place in the General Service Administration (GSA) fleet. Lastly, it is not a question of if the Army converts to an alternative fuel, but a question of when. The research was clear that fossil fuels may not last into the next century. TACOM may be forced to follow commercial industry in their choice of alternative fuels. This is why it is important to understand the decisions being made, as they could impact our future warfighters.
This research focused on the General Dynamics Land Systems North American employees in North America the Middle East and Asia Pacific. The researcher surveyed 300 employees within this organization to determine the impact of culture on the importance of leadership styles, skills, traits, and powerbases. The twenty-two quantitative questions were related to culture, leadership styles, skills, traits, and powerbases. There were two questions on culture, and five questions each on leadership styles, skills, traits, and powerbases. There was one open-ended qualitative question on leadership. The survey also included questions in regard to the employee’s gender, generation, region of employment, region of citizenship and highest level of education with a degree. These factors were utilized to determine if they moderate the impact of culture on the importance of leadership styles, skills, traits, and powerbases.

The survey was distributed to 300 employees, and 195 responses were received. Of the 195 responses, only 180 completed the survey, and these responses were used for the statistical analysis.

The main finding was that there was no statistically significant difference in the scores of preferred leadership styles, skill, traits, and powerbases of North American employees working in North America and North American employees working in the Middle East and Asia Pacific.
The world experienced a baby boom from 1945 to 1965. A large number of these baby boomers have retired or will be retiring in the near future. When these people leave their workplaces they take with them a wealth of accumulated knowledge and skills. As people are the greatest resource in an organization, human capital must be managed effectively to ensure continued success of the organization. This research paper investigates the impact the aging workforce is having in the work environment and what can be done to mitigate the negative dimensions of that impact.

There is a growing concern with the aging workforce in the United States and in many other nations around the world. What type of impact is this issue having on the Department of Defense (DoD) and the Army’s Acquisition Center within the TACOM Life Cycle Management Command (LCMC)? What type of impact is the aging workforce having on the private sector and foreign countries? What can be done to alleviate the aging workforce issue and to meet the challenges of knowledge management in today’s globalized environment?

The TACOM Acquisition Center, like many other organizations, is experiencing the retirement of its baby boomer workforce and those baby boomers that are fast approaching retirement eligibility. The problems facing the Acquisition Center are multi-faceted, but interrelated. This research assesses the extent to which the TACOM Acquisition Center is facing challenges from increasing requirements due to the aging workforce, such as senior, experienced workers retiring and the center not being able to retain that knowledge and experience. This research also determines what threats the aging workforce will pose in terms of loss of crucial knowledge, skills, abilities and expertise in the Acquisition Center.