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Analysis of the Marine Corps Logistics Command Contracting Workforce Competency Assessment

December 2024

Capt Matthew D. Bute, USMC

Thesis Advisors: Dr. Rene R. Rendon, Associate Professor
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Naval Postgraduate School

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ABSTRACT

In 2020, the Department of Defense implemented the National Contract Management Association's Contract Management Standard as its Contracting Competency Model to address both the buyer's and seller's sides of a contract. Previous competency models did not address the seller's side of a contract, leading organizations to focus only on training on buyer competencies. The purpose of the research was to assess the Marine Corps Logistics Command contracting workforce's proficiency with buyer competencies and knowledge of seller competencies. The research analyzed the results of a contracting competency assessment deployed to contracting workforce members of Marine Corps Logistics Command. The assessment requested that respondents rate their proficiency in performing buyer tasks and knowledge of seller tasks. Results were analyzed to identify trends of workforce member proficiency and knowledge of contracting competencies. The results were used to identify competency strengths and weaknesses and develop recommendations for Marine Corps Logistics Command to improve training and education to address those gaps. The research indicated respondents had higher proficiency ratings with buyer competencies than knowledge of seller competencies. Respondents had the highest proficiency in pre-award buyer competencies and had the lowest knowledge of pre-award seller competencies. The findings indicate that Marine Corps Logistics Command should conduct targeted training to address competencies with lower proficiency and knowledge ratings and should encourage contracting workforce members to pursue professional contract management certifications to broaden its workforce's knowledge base.

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Capt Matt Bute is a Supply Officer. He was commissioned through the U.S. Naval Academy where he received a Bachelor of Science in Computer Science. After graduating he served as the Supply Officer for Marine Tactical Air Command Squadron 28 in Cherry Point. After graduating from the Naval Postgraduate School he will be reporting to Marine Corps Logistics Command in Albany, Georgia to work in the Contracts Division.

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TABLE OF CONTENTS

LIST OF FIGURES

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LIST OF TABLES

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LIST OF ACRONYMS AND ABBREVIATIONS

AWF	Acquisition workforce
ANSI	American National Standards Institute
BtB	Back to Basics
CCCM	Certified Commercial Contract Manager
CCMA	Certified Contract Management Associate
CFCM	Certified Federal Contract Manager
CMMM	Contract Management Maturity Model
CMS	Contract Management Standard
CPCM	Certified Professional Contract Manager
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DoD	Department of Defense
ECP	Expeditionary Contracting Platoon
FAC-C	Federal Acquisition Certification in Contracting
FAR	Federal Acquisition Regulations
GAO	Government Accountability Office
IRB	Institutional Review Board
LOGCOM	Marine Corps Logistics Command
MCSC	Marine Corps Systems Command
NCMA	National Contract Management Association
NDAA	National Defense Authorization Act
OFPP	The Office of Federal Procurement Policy
PCO	Procuring Contracting Officer
R&D	Research and Development

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I. INTRODUCTION

This chapter introduces my research on assessing the contract management competencies of Marine Corps Logistics Command (LOGCOM). First, I discuss the background of the problem. Then I discuss the purpose of the research and the research questions. I then discuss the methodology, benefits, and limitations of the study.

A. BACKGROUND

Contract management is a highly complex and ever-evolving field. Amid heightened tensions with near-peer adversary nations, our technological advantage is expected to be acquired and fielded by a team of highly qualified professionals at the "speed of relevance." The Undersecretary of Defense for Acquisition aims to increase contracting speed by "increasing the currency of guidance to the contracting community" and "leveraging innovative contracting, such as Other Transaction Authorities" (Office of the Assistant Secretary of Defense for Acquisition, 2024). To accomplish this vision, a professional contracting workforce is essential.

Throughout the 20th century there has been continuous effort to recruit, train, and retain contracting personnel as members of the professional Acquisition Workforce (AWF). As early as 1952, Department of Defense (DoD) directives were issued that required each service to establish a "recruiting and training pipeline for civilian and military contracting personnel" (Defense Acquisition University [DAU], 2007). However, required training was subject to service chief guidelines and encountered various levels of commitment to implementation. To motivate the need for a professional acquisition workforce, the 1980s were particularly instructive. A report by the General Accounting Office (GAO) found that the prices of spare parts quietly rose year over year, likely due to their low unit price. In cases analyzed, price increases were accepted by purchasing agents without challenge or inadequately documented for acceptability, contrary to contemporary defense acquisition regulations (General Accounting Office [GAO], 1986). As a result, the Packard Commission was established to address cost overruns and corruption in the procurement system. The commission found that up to two-thirds of contract specialists had not attended mandatory acquisition training, only

half of contract specialists had college degrees which may or may not have been business related, and that contract specialist positions were classified as administrative, rather than professional, precluding a job qualification of mandatory business education (The President's Blue Ribbon Commission on Defense Management, 1986, pp. 68–70). These gaps in training and education likely contributed to the excessive cost overruns characteristic of the 1980s.

In response to haphazard acquisition workforce training and recruitment in the DoD, the Defense Acquisition Workforce Improvement Act (DAWIA) was passed by Congress (Defense Acquisition Workforce Improvement Act, 1990). The act called for the establishment of a Defense Acquisition University (DAU) and was intended to standardize professional training pipelines and certifications to ensure personnel were qualified to carry out functions of government acquisition. DAWIA set forward three tenets to ensure that personnel were qualified based on training, education, and experience (DAU, 2007, p. 45). DAWIA standardized three levels of certification in functional areas, explained in Table 1.

Table 1.   DAWIA Levels. Adapted from DAU (2007).

DAWIA Level	Definition
I	Courses establish fundamental knowledge.
II	Courses build on the knowledge gained at Level I through practical applications and are amenable to small group problem-solving and application scenarios.
III	Courses represent the pinnacle of achievement in the curricula. Students learn to synthesize knowledge and apply it critically in practical situations preparing them to make sound judgments in unpredictable situations. For this reason, Level III courses move the specialist to the generalist and develop creative problem solvers.

Between 1990 and 2020, DAU education offerings swelled to encompass 14 career fields. To become DAWIA certified, mastery of each level was evidenced by a combination of education, training, and experience (DAU, 2007, p. 42).

Attempts to standardize acquisition training across the federal government to promote workforce mobility were met with tepid enthusiasm. In 1992, the Office of Federal Procurement Policy (OFPP) Letter 92-3 "established standards for skill-based training in contracting and purchasing" but "did not prescribe a core government-wide

curriculum" (Office of Federal Procurement Policy, 2005). However, the letter required federal departments to establish mandatory competency-based training (DAU, 2007), which continues to inform present-day training curricula. In 2005, the OFPP released Policy Letter 05-01, rescinding Policy Letter 92-3. This letter directed civilian agency heads to bring contracting certification in line with defense-related contracting competencies and established the Federal Acquisition Certification-Contracting (FAC-C) for civilian agency contracting personnel. It also implemented mandatory training, education, and experience requirements for all contracting series personnel, including DoD contracting officers (Safavian, 2005).

Significant ramp ups in contingency operations in Iraq and Afghanistan after 2006 placed DoD reliance on private military contractors overseas in the spotlight. A 2013 report highlighted mismanaged operational contract support in those conflicts, leading to recommendations to "right-size" the acquisition workforce and strategically manage the acquisition of services to avoid cost overruns. The report also recommended the service chiefs effectively determine the right mix of military, civilian, and contractor personnel to align with mission requirements (GAO, 2013). A later report found that despite the DoD's use of competency assessments to identify the current skills of the AWF, they still had not properly accounted for or determined the appropriate size and mix of the AWF for current mission requirements, leaving the contract management area on the high-risk practices list (GAO, 2015). To this day, there remains significant debate over the appropriate mix of civilian, military, and contractor labor resident in the AWF. As of 2023, DoD Contract Management was still included on the GAO's high-risk practices list, with ratings shown in Figure 1 (GAO, 2023a).

DOD Contract Management

Rating changes since last update
No changes.

Criteria still needing attention
Capacity, Action Plan, Monitoring, and Demonstrated Progress
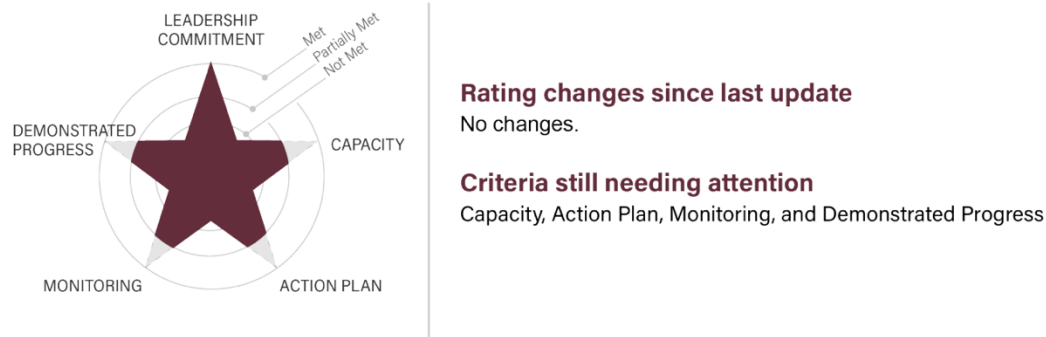
Figure 1. GAO's High-Risk Assessment of DoD Contract Management.
Source: GAO (2023a).

These reports highlight persistent problems facing the DoD contracting workforce, including a poor understanding of key competencies and an inability to determine if workforce talent is appropriately applied.

The DoD has previously had a contract management competency framework. In 2013, Albano conducted a comprehensive analysis of the contemporary DoD contracting competency framework and the National Contract Management Association's (NCMA) Contract Management Standard (CMS). He found that while both frameworks addressed the different phases of the contract life cycle, the DoD framework was historically more skills-oriented and the CMS was more knowledge-based (Albano, 2013). While both approaches have merit, a skills-based training approach emphasizes tasks that employees could memorize and repeat while a knowledge-based approach requires employees to understand and apply the appropriate contracting procedures to make sound business decisions. Additionally, while the DoD's previous competency framework did not have three distinct lifecycle phases, the NCMA CMS breaks activities into pre-award, award, and post-award phases. The DoD's competency framework was only based on buyer tasks, with no coverage of seller activities, while the NCMA's standard includes seller tasks as well. Albano's research effectively motivated the need for the DoD to transition to a more knowledge-based competency approach. Other research prior to 2020 compared the previous DoD competency framework with the NCMA CMS and recommended wider adoption of the NCMA CMS by government agencies, industry partners, and academia (Cleven et al., 2024, p. 45-48). Rendon also argued for wider

adoption of the NCMA CMS because the standard breaks activities into three distinct lifecycle phases, includes both buyer and seller activities, and would enhance communication and collaboration between government and industry officials (Rendon, 2018, p. 14). In the National Defense Authorization Act (NDAA) of 2020, Congress directed the DoD to change what and how it teaches the contracting workforce. Congress directed the adoption of an industry standard that has been accredited by a third party (National Defense Authorization Act, 2019). The DoD agreed to replace the previously used contract management competency framework with the American National Standards Institute (ANSI) accredited CMS, established by the NCMA (DAU, 2022).

In 2020, the Office of the Undersecretary of Defense for Acquisition and Sustainment announced the implementation of "Back to Basics" (BtB) for the acquisition workforce. BtB consolidated the focus in different career paths down to six functional areas, consisting of Program Management, Contracting, Life Cycle Logistics, Engineering and Technical Management, Test and Evaluation, and Business–Financial and Cost Estimating (DAU, 2022). For contracting personnel, this approach implemented a single professional certification level (Undersecretary of Defense for Acquisition and Sustainment, 2020). The DoD provided guidance on core tasks or "competencies" for contracting personnel to do their job effectively (Contracting Certification Taskforce, 2020). For contracting personnel, BtB's implementation was intended to encourage continuing education in the contracting profession while eliminating excess education and training hours that did not relate to job performance. Given that the BtB initiative is relatively new, the literature is sparse on the AWF's proficiency with and knowledge of the new DoD Contracting Competency Model. Therefore, prior to implementing significant change in contracting training and education, there is a pressing need to develop a baseline of the contracting workforce's self-assessed strengths and weaknesses to identify areas for improvement throughout the contract life cycle.

Moreover, one must consider that contract management is a complex and ever-changing field. Contracting regulations become more complex over time due to new requirements set forth in legislation. Additionally, contracting competencies may not translate across commands; each command's contracting environment and resulting strategy is unique to meet the command's mission. For example, LOGCOM contracts

heavily for services, which could reveal different competency gaps than other commands. A well-trained workforce is essential to dealing with those weaknesses, but the command may not currently know where to focus its attention. Due to LOGCOM's position as a global maintenance depot and its use of contractors across the United States, it is essential that the workforce understands the contract life cycle from both buyer and seller perspectives. How does the LOGCOM contracting workforce rate on their knowledge or awareness of seller tasks?

The DoD has adopted the new CMS as its contracting competency framework. This standard establishes the contract management competencies in a process-oriented framework and includes both buyer and seller perspectives. However, the DoD contracting workforce's current training and existing Federal Acquisition Regulation (FAR) only account for the buyer's perspective. To what extent is the DoD contracting workforce knowledgeable and aware of the seller's perspective? In today's complex contracting environment, organizations must know how their workforce's proficiency in buyer tasks and knowledge of seller tasks align under this new standard.

B.   PURPOSE

The BtB initiative was intended to further professionalize the contracting workforce and bring personnel knowledge and competencies in line with nationally recognized standards. Various contracting organizations have been surveyed to develop a contracting competency baseline (Davies et al., 2021; Hayashi & Pfannenstiel, 2020; Hoover, 2021; Moyer et al., 2020; Powell, 2021). However, LOGCOM has not yet been assessed. LOGCOM's senior leadership could therefore benefit from an objective study of self-identified strengths and weaknesses throughout the contract life cycle so it can focus on providing the contracting workforce improved training on identified gaps. Additionally, much attention is given to the workforce's ability to perform buyer activities, however, little data exists to assess the contracting workforce's knowledge of seller activities. Analysis of workforce knowledge of seller activities could reveal opportunities for enhanced collaboration with industry partners (Rendon, 2017).

This research seeks to identify any gaps in contract management proficiency and knowledge, and to provide LOGCOM contracting personnel with training

recommendations to fill these gaps. The intent is to contribute to a growing body of research to define and quantify the contracting abilities of the acquisition workforce and identify opportunities to improve contracting across the DoD.

C.   RESEARCH QUESTIONS

The results of a contracting competency assessment could reveal LOGCOM's organizational strengths and opportunities for improvement. Specifically, this research aims to answer the following questions:

1.   Based on the contract management competency assessment, in which competencies are LOGCOM's contracting personnel more proficient or knowledgeable?

2.   Based on the contract management competency assessment, in which competencies are LOGCOM's contracting personnel less proficient or knowledgeable?

3.   What training recommendations could be given to LOGCOM to improve their contracting workforce competencies?

D.   METHODOLOGY

This research uses a contract management competency assessment survey developed based on the NCMA's CMS. The survey contains 125 questions and covers both buyer and seller competencies; however, the survey asks the respondent to rate their *proficiency* with buyer activities and *knowledge* of seller activities. Because few government contracting personnel will have conducted seller tasks, the survey presupposes that respondent knowledge of seller tasks is more relevant than their proficiency. After obtaining approval from the Naval Postgraduate School Institutional Review Board (IRB), the Marine Corps IRB, and the Marine Corps Survey Office, the survey was administered to the civilian and military contracting workforce at LOGCOM. The survey was not mandatory; it was completely optional. Results and recommendations will be provided to the command deck of LOGCOM to identify areas for improvement and inform a future training plan.

E.   BENEFITS

This research provides several benefits to LOGCOM and the Marine Corps as a whole. The research provides an assessment of contracting competency strengths and

weaknesses based on the CMS. Since DAWIA's inception, certification and standardization across the DoD have been a priority for acquisition workforce development and career progression. The research offers an opportunity to assess LOGCOM based on these ideal standards. The survey is free, relatively easy to administer remotely, and provides an opportunity for workforce members to assess their organization's contracting strength without requiring a significant amount of time. The results of the survey could identify opportunities for further collaboration with industry and help to improve LOGCOM contracting in line with industry best practices (Rendon, 2017). Subsequent competency analysis at LOGCOM could be compared to previous results to evaluate the implementation of training recommendations that will come from these results. Finally, the research could be compared to other competency assessment results across the DoD to identify trends and improve DAU's ability to provide timely and relevant education to the AWF.

F.   LIMITATIONS

There are several potential limitations to this research. The survey was administered completely anonymously, so information about certification or experience levels provided by respondents cannot be verified. Additionally, the survey was completely optional, so the data collected may not be fully representative of the entire contracting workforce at LOGCOM. Furthermore, the survey is a qualitative self-assessment of strengths and weaknesses. An assessment in the form of a knowledge test could be insightful but is not feasible due to the approval levels that would be required to administer the test. Despite these limitations, the research could provide significant insight into workforce strengths and weaknesses so command personnel can know where to focus additional training resources.

G.   OUTLINE OF THE REPORT

This report is organized into five chapters. The first chapter introduced the research. The second chapter provides a literature review that sets the foundation for the research. The third chapter provides the methodology of the study. The fourth chapter provides the findings of the research, analysis of the results, and recommendations for

improvement for LOGCOM. The fifth chapter provides a summary, conclusion, and areas for further research.

H.   SUMMARY

This chapter introduced the research on assessing the contract management competencies of LOGCOM. First, I discussed the background of the problem. Then, I discussed the purpose of the research and introduced the research questions. Finally, I discussed the methodology, benefits, and limitations of the study. The next chapter presents the literature review for my research.

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II.   LITERATURE REVIEW

The purpose of this chapter is to provide a literature review that sets the foundation for this research. I first discuss the theoretical foundation of competency theory and the DoD's adoption of the CMS as its Contracting Competency Framework. I then discuss previous competency assessments, introduce the impact of gaps in contracting proficiency and knowledge, and provide training and improvement strategies for the contracting workforce. Finally, I discuss the operational and strategic implications of knowledge or proficiency gaps. The objectives of this literature review are to assess the current state of contracting workforce competency research and identify gaps in the existing literature to accurately frame research into LOGCOM's contracting workforce competencies.

A.   THEORETICAL FOUNDATION

Competency theory has taken root in diverse fields such as science, engineering, and education to develop standardization in complex professions. In the 1980s, psychologist David McClelland proposed that traditional academic examinations used to hire the smartest candidates did not necessarily indicate high future job performance. Instead, he proposed the development of competency-based models of assessment, initiating significant research into which behaviors would translate to superior job performance (Brundrett, 2000). Competencies are defined as "the skills, knowledge, experience, attributes, and behaviors that an individual needs to perform a job effectively" (Strebler et al., 1997). Alternatively, competencies are "expressed as behaviors that an individual needs to demonstrate" or "minimum standards of performance" (Hoffmann, 1999). Both definitions emphasize the significance of measurable and observable human behavior as related to accomplishing job tasks. Competency-based education blends domain specific training and workforce experience to provide employees who are able to perform key professional tasks (Makulova et al., 2015). The primary use of competency models is to give focus to training, education, and development (Strebler et al., 1997). Common to each definition of competency is that

they provide an objective means to assess job performance and allow human resources departments to hire and retain people who can accomplish the mission.

By distilling key tasks into broadly applicable competencies, a professional community may give structure to the development of workforce capabilities in a repeatable, standardized way. Establishing a common set of competencies across the DoD ensures department wide focus on the same objectives and provides a way to measure organizational adherence to these agreed-upon standards. Competency models have successfully been developed and recommended for adoption by hiring authorities in diverse fields, to include systems engineering and project management (Hughes & Flanigan, 2022; Whitcomb et al., 2015). The DoD has had contracting competency frameworks in place before; in 2007, the DoD established its Contracting Competency Model to identify and address competency gaps, though this model only addressed buyer tasks and was not structured using three distinct contract life cycle phases (Rendon & Winn, 2017). In response to section 861 of the 2020 NDAA, the DoD adopted the nationally accredited NCMA CMS as its Contracting Competency Model in pursuit of a standard across the DoD to include buyer tasks and seller tasks (DoD, 2020; National Defense Authorization Act, 2019). In 2023, the Office of Management and Budget (OMB) established a Contracting Competency Model also based on the NCMA CMS, using the standard as the basis for the entire federal government's contracting workforce training (Cleven et al., 2024, p. 45). Additionally, industry partners such as Leidos, Lockheed Martin, and other sellers have adopted the NCMA CMS as part of their training and hiring processes. Various university programs have adopted the NCMA CMS in their training and education programs (Cleven et al., 2024, p. 48). The widespread adoption of the CMS represents a concerted effort to "speak a common language" and realize enhanced collaboration and communication between government, industry, and academia (Rendon & Schwartz, 2021, p. 125). One might argue that competency frameworks are too rigid and overly prescriptive for job tasks that do not necessarily apply to every contracting position. However, the new standard provides context to the entire contract life cycle and allows the buyers an improved ability to adjust acquisition strategies based on both buyer and seller perspectives.

Key to the development of the CMS was the belief that contracting education should be based around key competencies, and it has five components: guiding principles, contract life cycle phases, domains, competencies, and job tasks, explained in Table 2.

Table 2.   CMS Components. Adapted from NCMA (2023).

Component	Definition
Guiding Principles	These principles apply to all contract managers in all phases of the contract life cycle.
Contract Life Cycle Phases	The phases of a contract: pre-award, award, and post-award.
Domains	The areas within a contract life cycle phase that produces significant contract management outcomes.
Competencies	The processes utilized to produce the expected contract management outcomes of the domains.
Job Tasks	The tasks performed on a routine basis by contract managers.

The document is recognized by the ANSI as the accredited and authoritative standard for industry and government contract managers (both buyers and sellers), designed to increase efficiency and improve productivity (NCMA, 2023). The CMS provides measurable and observable standards both for evaluation of past employee performance and serves as a benchmark for future actions. It provides a lens of best practices to ensure contract management procedures are in line with the contracting activity's business goals.

In this section, I discussed competency theory. The next section discusses the DoD's adoption of the NCMA CMS as its competency framework.

B.   DOD ADOPTION OF CMS

In 2020, the DoD based its Contracting Competency Model on the NCMA CMS to comply with section 861 of the Fiscal Year 2020 National Defense Authorization Act's requirement that "the certification requirement for any acquisition workforce career field shall be based on standards developed by a third-party accredited program based on nationally or internationally recognized standards" (National Defense Authorization Act, 2019). Despite the DoD being a public sector organization, the CMS was adopted to align with industry contract management best practices with the goal of ensuring responsible

use of appropriated funds. While industry firms will traditionally act as both buyers and sellers in contracts with other firms, the DoD only plays the role of buyer. However, by implementing a standard that addresses both sides of a contract, the DoD demonstrated commitment to enhancing understanding of traditional seller tasks to improve communication and efficiency when working with industry (Rendon, 2017).

By focusing on key repeatable behaviors of contract managers, the DoD has shown commitment to standardizing contract management across the DoD. Contracting workforce members now have a set of guidelines to focus the practice of their profession throughout the contract life cycle. Knowledge siloes may still exist where contract management workforce members only work specific portions of the contract life cycle. However, the adoption of the NCMA's CMS as the DoD's competency model to become certified as a DAWIA Contracting Professional provides focus and structure toward the standardization of contract management best practices in all DoD contracting activities. This section discussed the DoD's adoption of the CMS as its chosen contracting competency framework. The next section discusses how the DoD has conducted competency assessments of its contracting workforce in the past.

C.   COMPETENCY ASSESSMENTS

Several studies have conducted competency assessments and provided results and recommendations for organizational improvement (Federal Acquisition Institute, 2009; Office of the Undersecretary of Defense, 2014). In 2009, the Federal Acquisition Institute conducted an acquisition workforce competency assessment to help civilian agencies understand current skills, identify opportunities for training, and to help plan for future AWF needs. Specific to the contracting career field, the survey assessed 17 technical competencies, 24 general competencies, and 56 aligned skills (Federal Acquisition Institute, 2009). Additionally, based on the previous DoD Contracting Competency Framework, the DoD conducted a competency assessment in both 2008 and 2014 to identify changes in capabilities over time (Office of the Undersecretary of Defense, 2014). These research methods provide a model for future competency assessments. Initial surveys set a baseline of workforce competencies, and subsequent surveys could provide insight into changes in competency levels over time.

Since the DoD adopted the NCMA CMS, multiple studies have been completed to assess commands' contracting workforce competencies under the new standard (Davies et al., 2021; Hayashi & Pfannenstiel, 2020; Hoover, 2021; Moyer et al., 2020; Powell, 2021). At Marine Corps Systems Command, proficiency in buyer tasks were rated, on average, higher than knowledge of seller tasks (Hayashi & Pfannenstiel, 2020). Similarly, the Marine Expeditionary Contracting Platoons on average rated higher on buyer proficiency than seller knowledge (Hoover, 2021). Further research is required to support or reject trends of lower seller task knowledge than proficiency with buyer tasks. Additionally, studies found that Managing Disagreement was the lowest rated task for both buyer and seller competencies (Hayashi & Pfannenstiel, 2020; Hoover, 2021). This common observation suggests that competencies involving both buyer and seller could be a significant pain point at other DoD commands, to include LOGCOM. Regardless of these trends, strengths and weaknesses will likely be intensely command-specific, given the unique mission of each individually surveyed command. For example, LOGCOM contracts heavily for major military item repair parts, which may reveal higher competencies in contracting for goods than services.

Significant research has been conducted to identify proficiency and knowledge of contract management competencies across the DoD. By establishing BtB, DoD leadership had a goal to refocus contracting training and education in line with industry best practices. Using the NCMA CMS, BtB gave the contracting workforce an improved standard of doing business through a series of competencies that enable key tasks to be performed throughout the contract life cycle (Contracting Certification Taskforce, 2020). The development and use of a competency survey provides DoD commands an honest, employee-level assessment of contract life cycle strengths and weaknesses (Rendon, 2022). Previous research has evaluated contracting competencies at various Marine Corps commands (Hayashi & Pfannenstiel, 2020; Hoover, 2021). However, research on LOGCOM contracting workforce competency is sparse.

Organizations conduct competency assessments to identify gaps in contracting competencies, which translate to an organization's contracting performance. The next section discusses the impacts of those competency gaps.

D. IMPACT OF COMPETENCY GAPS

A competent contracting workforce is one facet of the execution of an organization's diverse contracting profile. In particular, Rendon states that for an organization to be successful, they must have "competent people, capable processes, and effective internal controls," which is known as auditability theory. Without any of these elements of the auditability triangle (Figure 2), an organization will experience breakdowns in the efficiency of controls over procurement (Rendon & Rendon, 2015).

Conceptual Framework
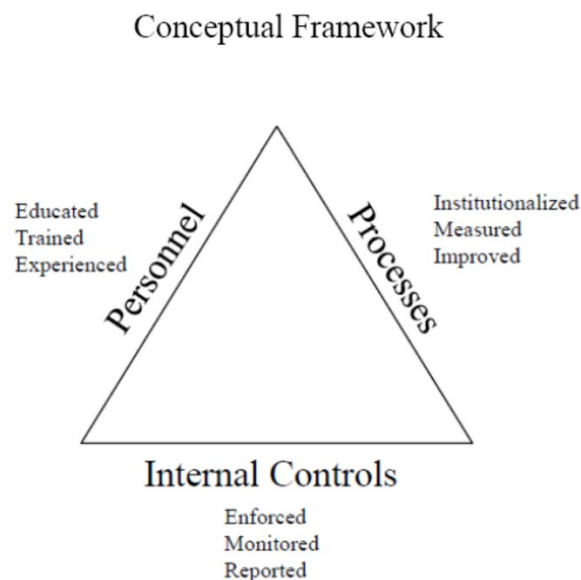
Figure 2.   Auditability Triangle. Source: Rendon & Rendon (2015).

Several efforts have been made to understand and support the link between a well-trained and educated workforce and contracting outcomes. Since FY2019, the percentage of sustained bid protests has increased from 13% to a staggering 31% (GAO, 2023b). This percentage of contested contract actions could be due to lower buyer competency levels in the pre-award and award phased of the contract life cycle. DoD contract management has been on the GAO's high-risk list since 1992, largely due to limited capacity of the existing workforce to accomplish all required responsibilities (GAO, 2023a). Additionally, the DoD has listed the lack of a robust defense industrial base as one of its top 10 management challenges, blaming contracting officials' misinterpretation or misapplication of procurement policy for exposing the DoD to unnecessary risk of cost overruns and counterfeit materials (DoD Inspector General,

2023, p. 2). High attention on the cost-effective purchase of goods and services on the government's behalf further motivates the requirement for contracting competency assessments.

Additionally, in an Inspector General report, cost analysis was identified as a significant weakness for Defense Contract Management Agency in the pre-award and award phases, indicating a requirement for more training in this area (Inspector General, 2015). In 2010, Terry argued that more training was needed for contract administrators and highlighted the consequences of a lack of oversight of contractors, as evidenced by poor contractor cost reporting in support of the Logistics Civil Augmentation Program (Terry, 2010). Along the same vein, contracting personnel are often ill-equipped to administer terms and conditions of increasingly complex contracts, sometimes involving services performed by private military firms authorized to use force in self-defense (Dew & Lewis, 2009).

In summary, poor workforce training in cost analysis and contract administration functions ultimately result in ballooning costs for the American taxpayer. Therefore, there seems to be a pressing need to develop a quantifiable baseline to accurately assess contracting competency performance and knowledge to allow appropriate training plans to mitigate the strategic impacts of gaps in contract management knowledge. Cost savings could be realized with better awareness of knowledge and proficiency gaps in contracting workforce training. As organizations identify competency gaps within their workforce and understand the impact of those gaps, they should pursue training and process improvement strategies to fill those gaps. I discuss those efforts in the next section.

E.   TRAINING AND IMPROVEMENT STRATEGIES

The standardization of training and education of AWF members is not without precedent, especially in the Marine Corps. DAWIA mandated standardization of all contracting professionals' education across the DoD in 1991, upturning the longstanding policy of service-specific contract training (Defense Acquisition Workforce Improvement Act, 1990). In 1992, Schleiden made efforts to link civilian contracting officer competencies to enlisted Marine contract specialist competencies, to enhance their

professional education in line with DAWIA (Schleiden, 1992). Similarly, Whitcomb et al. (2015) analyzed the DoD's Systems Engineering Career Competency Model and linked key competencies and tasks to job success by paygrade. By doing so, these researchers were able to develop a career progression model and recommended the model's distribution to workforce hiring managers to improve the quality of new hires and development of the existing workforce. In 2009, the Contract Management Maturity Model (CMMM) survey was deployed to the Army Joint Munitions and Lethality Contracting Center to assess the contracting process maturity of the organization in relation to six process areas and identify opportunities for improvement (Puma & Scherr, 2009). Additionally, Rendon used the CMMM to identify areas for process improvement and training recommendations for the U.S. Navy's contracting organizations (Rendon, 2015). These studies serve as a model to link survey results to actionable worker tasks.

Existing literature shows that the contracting community does not know the extent of its performance with respect to the newly adopted DoD Contracting Competency Model. The CMS-based contracting competency assessment has been successfully deployed to multiple DoD commands to establish a baseline of workforce abilities. There are often significant competency gaps in workforce education and training, primarily in the areas of Managing Disagreement and seller competencies. Previous studies have identified recommendations to improve workforce contracting competencies to address these gaps (Hayashi & Pfannenstiel, 2020; Hoover, 2021). Identified competency gaps and training strategies to address those gaps are needed by today's contracting organizations. The next section discusses the implications of these training and education improvement strategies for LOGCOM.

F.   OPERATIONAL AND STRATEGIC IMPLICATIONS

LOGCOM is the seat of enterprise, operational level logistics. The command relies heavily on contractors to perform services beyond the organic capability of the Marine Corps. As a result, contracting personnel are relied upon at an increasing rate to purchase logistics augmentation services to support the operating forces around the world. LOGCOM's organizational structure is provided in Figure 3, demonstrating the significant complexity of the organization's contracting profile. The Contracts

Department provides support across three subordinate commands and to smaller elements stationed worldwide (Marine Corps Logistics Command, n.d.).
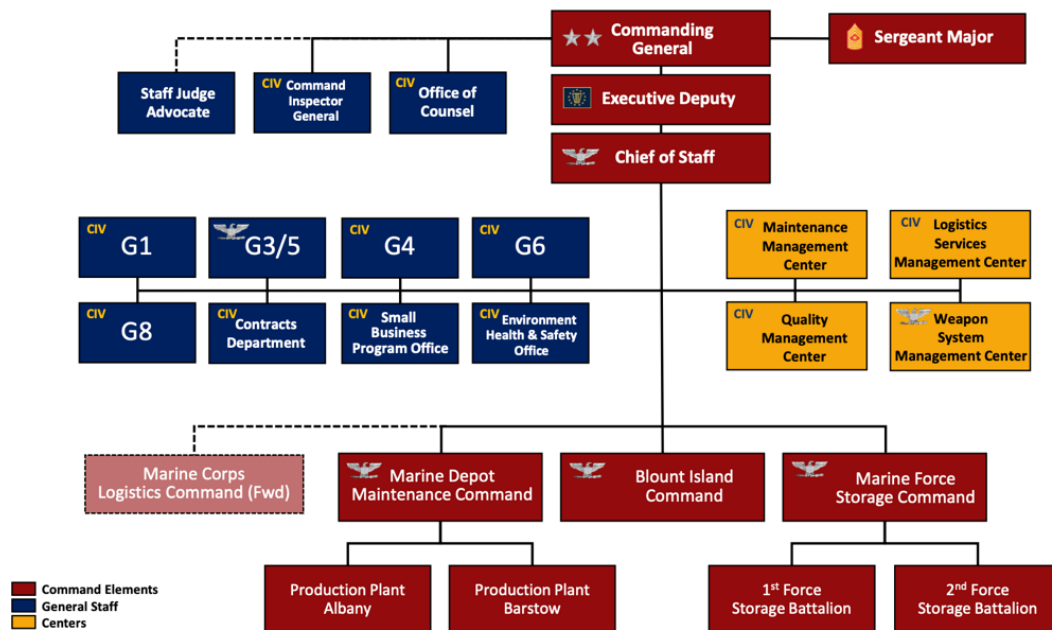

Figure 3.   Organizational Structure of LOGCOM. Source: Marine Corps Logistics Command (n.d.).

The movement and maintenance of military equipment around operational theaters has increased in complexity, meaning that the scope of contracting has often eclipsed the organic capability of military logistics. Ortiz found that reduced utilization of organic logistics capabilities has led to increased reliance on contractors, reducing Army readiness and changing the nature of future conflict logistics (Ortiz, 2012). Additionally, logistics services contracting tends to focus heavily on the award of the contract to the neglect of post-award contract administration (Dew & Lewis, 2009). Rendon also found that pre-award contracting processes showed higher maturity levels than those of post-award contracting processes (Rendon, 2015). In summary, the government frequently encounters challenges in ensuring the delivery of quality goods and services and in receiving the full value of what has been contracted. These findings motivate the need for further contracting workforce targeted education and training, especially in support of effective logistics with a worldwide reach.

In an age of rapid technological advancement, the government is increasingly reliant on contractors for innovative research and development (R&D) efforts. As a result, R&D procurement specialists are required to have a clear assurance that what they are buying aligns with DoD strategy. Decarolis et al. (2021) found that workforce perception of their work environment and leadership could be linked to the number of patents that result from federal R&D dollars. Regardless of contracting office, contracting personnel have both operational and strategic impacts on mission accomplishment, further motivating the need to identify targeted training opportunities unique to command mission. Due to the strategic and operational impact of contracting activities and individual buyer competence, there is a dire need to quantify abilities to allow commands to focus limited resources.

G.   SUMMARY

The purpose of this chapter was to assess the current state of contracting workforce competency research and identify gaps in the existing literature to accurately frame research into LOGCOM's contracting workforce competencies. I first discussed the theoretical foundation of competency theory and the DoD's adoption of the CMS as its Contracting Competency Framework. I then discussed previous competency assessments, the impact of gaps in contracting proficiency and knowledge, and training and improvement strategies for the contracting workforce. Finally, I discussed the operational and strategic implications of knowledge or proficiency gaps. The next chapter discusses the methodology used in this research.

III. METHODOLOGY

This chapter discusses the design and development of the methodology of this research. I first discuss the design of the survey instrument. I discuss the instrument's levels that respondents used to self-assess their competencies. Finally, I discuss survey approvals and deployment.

A. COMPETENCY ASSESSMENT INSTRUMENT DEVELOPMENT

The contracting competency assessment instrument was developed in 2021 by Rendon of the Naval Postgraduate School by identifying CMS competencies and job tasks aligned to the pre-award, award, and post-award phases of the contract management life cycle (Rendon & Schwartz, 2021, p. 125). The survey begins by gathering demographic information to assess the possession of a contracting warrant, the BtB certification level of the respondent, years of experience, and other related contracting professional certifications. The goal of collecting demographics of respondents was to identify patterns in the training, education, and experience levels of contract management personnel at the command.

Respondents are then asked about proficiency in buyer tasks such as Plan Solicitation, Request Offer, Price or Cost Analysis, Plan Negotiations, Select Source, Manage Disagreements, Administer Contract, Ensure Quality, Manage Changes, and Close Out Contract. Respondents are then asked about their knowledge of seller tasks such as Plan Sales, Prepare Offer, Plan Negotiations, Select Source, Manage Disagreements, Administer Contract, Ensure Quality, Manage Subcontracts, Manage Changes, and Close Out Contract. The survey provided a way to quantify self-assessed, qualitative ratings about contracting competencies.

Survey respondents rate their proficiency of performing buyer tasks and their knowledge of seller tasks using a Likert scale, which is a rating scale used to measure opinions, attitudes, or behaviors (Rendon & Schwartz, 2021). The survey is divided into buyer-related and seller-related tasks. The survey asks respondents to self-assess their proficiency with performing buyer tasks and their knowledge of seller tasks as described in the CMS. For buyer tasks, the respondent is asked to rate their proficiency in

performing buyer tasks by choosing one of five levels: Aware, Basic, Intermediate, Advanced, or Expert. For seller tasks, the respondent is asked to rate their knowledge of seller tasks by choosing one of given levels: None, Aware, Basic, Intermediate, or Advanced. The proficiency rating scale pertaining to buyer job tasks, is identified and defined in Table 3.

Table 3.   Buyer Proficiency Ratings. Adapted from Rendon & Schwartz (2021).

Proficiency Rating	Definition
(1) Aware	Applies the competency in the simplest of situations and requires close and extensive guidance.
(2) Basic	Applies the competency in somewhat difficult situations and requires frequent guidance.
(3) Intermediate	Applies the competency in difficult situations and requires little or no guidance.
(4) Advanced	Applies the competency in considerably difficult situations and generally requires no guidance.
(5) Expert	Applies the competency in exceptionally difficult situations and serves as a key resource and advises others.
N/A	Not applicable/not needed in my job

The knowledge rating scales, for understanding seller job tasks, are identified and defined in Table 4.

Table 4.   Seller Knowledge Ratings. Adapted from Rendon & Schwartz (2021).

Knowledge Rating	Definition
(1) None	I am not aware of this contractor competency.
(2) Aware	I am aware, but have no knowledge of this contractor competency.
(3) Basic	I have some basic level knowledge of this contractor competency.
(4) Intermediate	I have intermediate level knowledge of this contractor competency.
(5) Advanced	I have advanced level knowledge of this contractor competency.

Now that I have discussed the development of the competency assessment instrument, I will discuss survey deployment.

B.   SURVEY DEPLOYMENT

Organizational ethical guidelines for human subject research were followed to approve the use of the competency assessment. After gaining a favorable determination from Naval Postgraduate School IRB to administer the assessment, a copy of the instrument was submitted to the Marine Corps IRB which approved its use. Because the

assessment would be deployed to civilian workforce members, approval for workforce participation was obtained from the Marine Corps civilian labor union. Finally, approval was obtained for deployment from the Marine Corps Survey Office.

The survey was deployed online via the NPS-required online survey platform, Qualtrics (Naval Postgraduate School, n.d.). The survey was sent via an anonymous, reusable link to the leadership of LOGCOM for distribution to the civilian and military members of the contracts division. The survey was completely voluntary. No personally identifiable or confidential information was collected by the survey. Every effort was made to protect the anonymity of respondents.

The survey was available for two weeks. Responses were collected, and demographics patterns analyzed, to include years of experience and certification levels of the workforce members. The data was broken down into the three phases of contract life cycle and by buyer task proficiency and seller task knowledge. Because the entire workforce was offered the chance to take the survey, some tasks may not be applicable to their specific job, so any Not Applicable responses were recorded and did not impact the mean rating for each task.

C.   SUMMARY

This chapter discussed the design and development of the methodology of this research. I first discussed the design of the survey instrument. A definition was provided of each of the ratings respondents used to self-assess their competency levels. Finally, I discussed survey approvals and deployment. The next chapter analyzes the results of the assessment and provides training recommendations to address any competency gaps.

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IV. ASSESSMENT RESULTS AND ANALYSIS

This chapter first presents the assessment results, to include demographics of the assessment respondents, buyer competency proficiency ratings, and seller competency knowledge ratings. It then compares the results with the competency assessments of other U. S. Marine Corps (USMC) organizations. I then discuss targeted training recommendations for LOGCOM. Finally, I provide a summary of the chapter.

A. ANALYSIS OF ASSESSMENT RESULTS

Twenty-eight LOGCOM contract management personnel were invited to respond to the competency assessment. 20 personnel opened the survey link. 15 personnel responded, giving a response rate of 54%. Because of the small workforce sample size, and to ensure the anonymity of each respondent, no distinction between civilian or military personnel was collected. The respondents therefore represent a mix of civilian and military contract management personnel.

1. Demographics

Table 5 presents the demographics recorded in the first section of the survey.

Table 5.   Contracting Workforce Competency Assessment Demographic Results

CM Years of Experience			Years in Organization	
3 or less	5		3 or less	7
4 to 8	1		4 to 8	3
9 to 13	1		9 to 13	1
14 to 18	3		14 to 18	1
19 or more	5		19 or more	3
			PCO	6
DAWIA BtB Certification				
None	5		Professional Certifications	
Contracting Professional	10		None	13
			CFCM	0
			CCCM	0
			CCPM	0
			Other	2

Of the 28 contract management personnel invited to respond to the assessment, 15 responded. Of the responses recorded, all 15 reported their BtB certification levels. Ten of 15 were certified as Contracting Professionals. Though the survey did not ask, this number likely includes those who were certified under legacy DAWIA levels 1-3 before the BtB initiative who were grandfathered into the new system. While previous research delineated between individual DAWIA certification levels (Hayashi & Pfannenstiel, 2020; Hoover, 2021), this survey demonstrates that a majority of contracting workforce members have obtained the new, more focused certification (with competencies tied to job tasks), providing evidence that efforts to streamline contracting education are succeeding. Additionally, more than 50% of the workforce has more than nine years of experience in contract management, though only five respondents have worked in the LOGCOM contracts division for more than nine years. These numbers indicate a high level of contract management training and experience resident in the LOGCOM contracting workforce. Additionally, the survey was deployed to military members and civilian workforce members. Because military members typically rotate every three years, the numbers suggest that there is significant resident experience in the civilian workforce despite regular turnover of military contracting personnel.

Six of 15 respondents indicated that they are a Procuring Contracting Officer (PCO), that is, they are someone who has a warrant to obligate funds on behalf of the government. Only two of 15 respondents had obtained any professional certifications beyond the DAWIA-required Contracting Professional certification. Choices included Certified Federal Contracts Manager (CFCM), Certified Commercial Contracts Manager (CCCM), Certified Professional Contract Manager (CPCM), and Other. The two respondents with certifications outside of Contracting Professional both chose "Other," so it is unknown which professional certifications they hold. The lack of professional certifications resident in the workforce presents an opportunity for further professional development in workforce members. This section analyzed the demographics of the assessment's respondents. The next section explores the results of the assessment of proficiency with buyer competencies.

2. Buyer Competencies

The average ratings of each respondent's proficiency with buyer competencies are indicated in Figure 4. These findings are discussed, broken down by phases of the contract life cycle.

Figure 4.   Proficiency in Buyer Competencies

a. Pre-Award Phase

The buyer pre-award phase competencies consist of "Plan Solicitation" and "Request Offer" (National Contract Management Association, 2023). On the average, respondents rated the "Plan Solicitation" competency with a proficiency rating of

Intermediate (3.56) and the "Request Offer" competency with a proficiency rating of Intermediate (3.68). The Intermediate rating in the "Plan Solicitation" and "Request Offer" competencies means that respondents felt they could "apply the competency in difficult situations and require little or no guidance" (Rendon & Schwartz, 2021, p. 128).

b. Award Phase

The buyer award phase competencies consist of "Price and Cost Analysis," "Plan Negotiations," "Select Source," and "Manage Disagreement" (National Contract Management Association, 2023). On the average, "Price and Cost Analysis" received an Intermediate proficiency rating (3.45), "Plan Negotiations" received an Intermediate proficiency rating (3.12), "Select Source" received an Intermediate proficiency rating (3.48), and "Manage Disagreement" received an Intermediate proficiency rating (3.07). The Intermediate rating in the "Price and Cost Analysis," "Plan Negotiations," "Select Source," and "Manage Disagreement" competencies means that respondents felt they could "apply the competency in difficult situations and require little or no guidance" (Rendon & Schwartz, 2021, p. 128).

c. Post-Award Phase

The buyer post-award phase competencies consist of "Administer Contract," "Ensure Quality," "Manage Changes," and "Close Out Contract" (National Contract Management Association, 2023). On the average, "Administer Contract" received a rating of Intermediate (3.54), "Ensure Quality" received a rating of Intermediate (3.27), "Manage Changes" received a rating of Intermediate 3.49), and "Close Out Contract" received a rating of Intermediate (3.41). The Intermediate rating in the "Administer Contract," "Ensure Quality," "Manage Changes," and "Close Out Contract" competencies means that respondents felt they could "apply the competency in difficult situations and require little or no guidance" (Rendon & Schwartz, 2021, p. 128).

3. Seller Competencies

While the previous section presented respondent proficiency with buyer competencies, this section discusses respondents' knowledge of seller competencies. The

average ratings of each respondent's knowledge of seller competencies are indicated in Figure 5.

Figure 5.   Knowledge of Seller Competencies

a.   *Pre-Award Phase*

The seller pre-award phase competencies consist of "Plan Sales" and "Prepare Offer" (National Contract Management Association, 2023). On the average, respondents rated the "Plan Sales" competency with a knowledge rating of Basic (3.11) and the "Prepare Offer" competency with a knowledge rating of Aware (2.89). The Basic rating in the "Plan Sales" competency means that respondents had "basic level knowledge within this competency" (Rendon & Schwartz, 2021, p. 128). The Aware rating in the "Prepare Offer" competency means that respondents felt they "were aware, but had no knowledge of this contractor competency" (Rendon & Schwartz, 2021, p. 128).

b.   *Award Phase*

The seller award phase competencies consist of "Plan Negotiations," "Select Source," and "Manage Disagreement" (National Contract Management Association, 2023). On the average, "Plan Negotiations" received a knowledge rating of Basic (3.09), "Select Source" received a knowledge rating of Basic (3.17), and "Manage Disagreement" received a knowledge rating of Aware (2.87). The Basic rating in the "Plan Negotiations" and "Select Source" competencies means that respondents had "basic level knowledge within this competency" (Rendon & Schwartz, 2021, p. 128). The Aware rating in the "Manage Disagreement" competency means that respondents felt

they "were aware, but had no knowledge of this contractor competency" (Rendon & Schwartz, 2021, p. 128).

c. Post-Award Phase

The seller post-award phase competencies consist of "Administer Contract," "Ensure Quality," "Manage Subcontracts," "Manage Changes," and "Close Out Contract" (National Contract Management Association, 2023). On the average, "Administer Contract" received a knowledge rating of Basic (3.16) and "Ensure Quality" received a knowledge rating of Basic (3.08), "Manage Subcontracts" received a knowledge rating of Aware (2.83), "Manage Changes" received a knowledge rating of Basic (3.11), and "Close Out Contract" received a knowledge rating of Basic (3.25). The Basic rating in the "Administer Contract," "Ensure Quality," "Manage Changes" and "Close Out Contract" competencies means that respondents had "basic level knowledge within this competency" (Rendon & Schwartz, 2021, p. 128). The Aware rating in the "Manage Subcontracts" competency means that respondents felt they "were aware, but had no knowledge of this Contractor competency" (Rendon & Schwartz, 2021, p. 128).

4. Discussion of Assessment Findings

The previous section discussed how assessment respondents rated their knowledge of seller tasks. This section discusses the meaning of the findings. As expected, respondents rated their proficiency with buyer competencies higher than their knowledge of seller competencies, likely because most buyers have been trained on the FAR, which only addresses the buyer's perspective. Historically, buyer training may have overlooked the seller's perspective, which could explain the limited understanding of seller competencies. Ten of 10 buyer competencies received a proficiency rating of Intermediate. To assess buyer proficiency across contract life cycle phases, average ratings across each phase were calculated. The analysis reveals that respondents rated pre-award competencies the highest (3.62), award competencies the lowest (3.28), and post-award competencies in the middle (3.43). The lowest rated buyer competency was "Manage Disagreement" in the award phase.

Additionally, on the average, seven of 10 seller competencies received a knowledge rating of Basic, with the remaining three receiving a rating of Aware. When

analyzing by phase, pre-award, award, and post-award competencies all received an average rating of Basic. The lowest rated seller competency was "Manage Subcontracts."

The higher rating of proficiency with buyer competencies than knowledge of seller competencies may reflect the scope and focus of training and experience of contract management personnel by LOGCOM. Of the buyer competencies, the "Request Offer" competency had the highest rating, indicating the command may currently focus its training on this buyer task. In the award phase, "Price and Cost Analysis" and "Select Source" scored well in comparison to the rest of the Award phase, suggesting significant resident experience and proficiency with determining best value to the government. However, "Plan Negotiations" and "Manage Disagreement" received lower scores, which could reflect LOGCOM's focus on acquisitions that do not require negotiations, and which may not often involve disagreement between the government and its contractors. In the post-award phase, "Administer Contract," "Manage Changes," and "Close Out Contract" scored higher, suggesting that LOGCOM likely has significant resources devoted to training its contracting officers and contracting specialists to appropriately conduct most contract administration duties. "Ensure Quality" received a lower score, which may reflect the demographics of the assessment's target audience. Specifically, contracting officer representatives, whose job duties reflect quality assurance tasks, were not surveyed. Regardless, the lower rating on this competency suggests room for improvement in training contract management personnel to ensure that the procuring activity has a clear understanding of their role in contract quality assurance requirements.

Overall, the respondents rated their pre-award proficiency in buyer competencies higher than any other phase and award phase competencies as the lowest. This disparity between ratings by phase may indicate heavy focus on training in pre-award actions to the detriment of award and post-award phase proficiency in buyer competencies. This finding supports Rendon's finding that pre-award contract process maturity is higher for pre-award processes than award and post-award processes (Rendon, 2015). Also, it is possible fewer personnel are regularly required to perform the functions of the award phase, resulting in lower proficiency by survey respondents.

To analyze respondent knowledge of seller competencies, an average was calculated across the three phases of the contract lifecycle. On the average, respondents rated their knowledge of pre-award competencies as Intermediate (3.00), award competencies as Intermediate (3.04), and post-award competencies as Intermediate (3.09). In the pre-award phase, respondents rated the "Prepare Offer" competency lower than the "Plan Sales" competency, indicating lower buyer understanding of how contractors develop their proposals before submitting them for consideration. In the award phase, respondents rated the "Select Source" competency highest, followed by "Plan Negotiations" and "Manage Disagreement." "Manage Disagreement" had the second lowest knowledge rating of all the seller competencies, and the lowest proficiency rating of all the buyer competencies. These low ratings support Rendon's findings there is a deficiency in understanding and knowledge of these contract management tasks from both the buyer and seller's perspectives (Rendon & Schwartz, 2021). In the post-award phase, respondents rated the "Manage Subcontracts" competency lowest of all seller competencies (2.83). Having low knowledge ratings of the "Manage Subcontracts" competency demonstrates a low understanding of the supply chain management associated with the acquisition of those products or services. This section provided an analysis of the competency assessment results. The next section discusses how these results compare to previous assessments of other organizations.

B.   COMPARISON WITH OTHER ORGANIZATIONS

In this section, the results of LOGCOM's competency assessment will be compared with previous studies of Marine Corps Systems Command (MCSC) and Marine Corps Expeditionary Contracting Platoons (ECP).

1.   Marine Corps Systems Command

In 2020, Hayashi and Pfannenstiel (2020) conducted a competency assessment to analyze MCSC's contract management workforce. Next, I discuss how their assessment compares to my assessment of LOGCOM, broken down into proficiency in buyer competencies and knowledge of seller competencies.

a.   Buyer Competency Comparison

In the MCSC assessment of buyer competencies, Hayashi and Pfannenstiel (2020) found that their average pre-award phase rating was 4.01, compared to this study's average rating of 3.62. Their average award phase rating was 3.87, compared to this study's average rating of 3.28. Their average post-award phase rating was 3.76, compared to this study's average rating of 3.43. MCSC rated all buyer competencies higher than those of LOGCOM. However, higher proficiency ratings at MCSC could be due to the difference in demographics; the average years of experience was nine to 13 at MCSC, contrasting to an average of four to eight years of experience at LOGCOM, with seven out of 15 respondents with less than three years of experience. Regardless, both workforce assessments revealed that respondents rated award and post-award competencies lower than pre-award competencies. This decline in competency ratings as the contract life cycle progresses may suggest a gap in training and education to address later contract actions and may be where to focus future training efforts. Both assessments also found that the "Manage Disagreement" competency was the lowest rated buyer competency.

b.   Seller Competency Comparison

In the MCSC assessment of seller competencies, Hayashi and Pfannenstiel (2020) found that their average pre-award phase rating was 3.23, compared to this study's average rating of 3.00. Their average award phase rating was 3.39, compared to this study's average rating of 3.04. Finally, their average post-award phase rating was 3.28 compared to this study's average rating of 3.09. Like the buyer competencies, the MCSC workforce rated their knowledge of seller competencies higher than the ratings of LOGCOM. However, for seller competencies, the pre-award phase presented the lowest ratings for both commands, demonstrating lower knowledge of how contractors plan sales and prepare offers. Additionally, both assessments found that the "Manage Disagreement" competency was the rated low; the competency was the lowest for MCSC and the second lowest for LOGCOM, only behind "Manage Subcontracts."

c.   *Comparison Implications*

The competency assessments support Hayashi and Pfannenstiel's claim that the contract management workforce may have lower proficiency in award and post-award buyer competencies (2020). The assessments suggest there could be an institutional focus on pre-award competencies, often to the detriment of award and post-award competencies. It is also possible that commands tend to assign workforce members to pre-award actions early in their careers, leading to fewer early opportunities to put award and post-award competencies into practice. Enhanced training could begin with a focus on the award and post-award phases in buyer competencies.

Additionally, respondents tended to have lower knowledge of pre-award seller competencies. This lower knowledge level could be because government contract management workers would likely only interact with contractors after an award has been made, with little knowledge of how contractors prepare offers prior to submission. Improved training to address early contract life cycle seller activities could help the contract management workforce to understand industry's perspective when both parties are preparing to execute a contract.

2.   **Marine Corps Expeditionary Contracting Platoons**

Hoover (2021) conducted a competency assessment of three ECPs and their collocated regional contracting office across three geographic locations. This section will compare the results of Hoover's study with my assessment of LOGCOM.

a.   *Comparison of Buyer Competencies*

Hoover (2021) found in his assessment of buyer competencies that the average of proficiency ratings of the pre-award phase competencies was 3.42, compared to LOGCOM's rating of 3.62. Their average award phase rating was 2.78, compared to LOGCOM's rating of 3.28. Finally, their average post-award phase rating was 3.00, compared to LOGCOM's rating of 3.43. The ECP participants rated their proficiency with buyer competencies lower than did LOGCOM. Again, demographics demonstrated that much of the workforce was less experienced, with 34 of 41 respondents having fewer than eight years of contract management experience. Both studies again demonstrated a

higher rating of proficiency with pre-award competencies than award and post-award competencies.

b.   Comparison of Seller Competencies

Hoover (2021) found in his assessment of seller competencies that the average of knowledge ratings of the pre-award phase competencies was 2.88, compared to LOGCOM's rating of 3.00. Their average award phase rating was 2.71, compared to LOGCOM's rating of 3.04. Finally, their average post-award phase rating was 2.67, compared to LOGCOM's rating of 3.09. ECP participants rated their knowledge of seller competencies lower than those of the LOGCOM workforce. When analyzing by contract life cycle phase, the ECPs rated their knowledge of pre-award competencies the highest, while LOGCOM rated its knowledge of post-award competencies the highest. Hoover also noted that the ECP workforce was relatively junior, which suggests that these commands often use more junior personnel in pre-award activities (2021).

c.   Comparison Implications

Hoover's assessment (2021) that proficiency with buyer competencies tend to decrease as the contract life cycle progresses, is consistent with the findings from Hayashi and Pfannenstiel's assessment (2020) and my assessment of LOGCOM. Both the ECPs and LOGCOM had the lowest proficiency with the award competencies, suggesting that more focus is currently given to pre-award and post-award activities and revealing an opportunity for education and training in the award phase.

Regarding seller competencies, Hoover (2021) found that ratings of knowledge of seller competencies tended to decrease as the contract life cycle progressed, while my assessment found that ratings of knowledge of seller competencies increased as the contract life cycle progressed. In both assessments, the "Manage Disagreement" competency was rated low; for the ECPs, it was the lowest rated competency, while for LOGCOM, it was the second lowest rated competency. Now that I have discussed the results of my assessment and its comparison with other contract management organizations, I discuss recommendations for senior contract management leadership.

C. RECOMMENDATIONS FOR SENIOR LEADERS

The CMS based competency assessment is intended to provide a baseline of workforce proficiency and knowledge of contract management related competencies. This section discusses recommendations for senior leaders to improve the organizational contracting competency of LOGCOM.

1. Recommendations for Sustainment of Best Practices

While LOGCOM has significant contract management experience within its workforce, the high turnover of employees means that the average number of years of experience specifically with LOGCOM is much lower. Based on the assessment results, the following three recommendations are provided.

1. Continue to recruit experienced personnel in the 1102 job series to enhance the training and education of more junior workforce members.
2. Sustain training and education in pre-award buyer competencies, the highest rated phase of the assessment.
3. Conduct periodic competency assessments to analyze the effectiveness of changes to the training program at LOGCOM.

2. Recommendations for Enhancing Contracting Workforce Education and Training

Based on LOGCOM's competency assessment, there are several opportunities for targeted training to improve workforce competencies. Based on the assessment results, the following recommendations for improvement of contracting workforce education and training are provided.

1. Conduct targeted training to address the award phase of the contract management life cycle, which had the lowest proficiency ratings of the buyer competencies. These competencies include "Price and Cost Analysis," "Plan Negotiations," "Select Source," and "Manage Disagreement" (National Contract Management Association, 2023). Request additional training from DAU to address LOGCOM-specific competency gaps.
2. Encourage workforce members to pursue professional certifications in contract management, such as CFCM, CCCM, CPCM, and Certified Contract Management Associate (CCMA). The assessment revealed that only two of 15 respondents held professional certifications outside of the DAWIA-mandated certificate. These certifications educate on both buyer and seller perspectives and provide more context to the contract management life cycle. Additionally, these certifications encourage holders to remain up to date on industry best practices and standards,

allowing LOGCOM to become more compliant with accepted contract management practices and reduce risk to cost, schedule, and performance of contracts.

3. Modify LOGCOM's contract management training to include additional focus on the seller's perspective of a contract. Pursuant to the CMS, understanding the seller's perspective will offer enhanced opportunities for collaboration and more effective contract management practice (Rendon & Schwartz, 2021). Historically, the DoD has only focused on buyer-specific competencies, but the new Contracting Competency Model mandates education and training on both sides of a contract (Contracting Certification Taskforce, 2020).

4. Conduct targeted training to address the lowest rated competency from each set of competencies: "Manage Disagreement" from the buyer's perspective, and "Manage Subcontracts" from the seller's perspective. "Manage Disagreement" was rated the lowest of the buyer competencies and the second lowest of the seller competencies. This low rating reveals a key opportunity to train personnel to handle protests or informal disagreements, which involve both buyer actions and seller actions and can cause significant delays in the execution of a contract. "Manage Subcontracts," a seller competency that does not have an analogy in the buyer competencies, offers an opportunity for workforce members to practice systems thinking, and understand the entire contract management system that enables LOGCOM to receive goods and services (Carlson, 2017). A strong understanding of the "Manage Subcontracts" competency is crucial for the LOGCOM contracting workforce, as effective supply chain management is essential for ensuring uninterrupted support in the fulfillment of goods and services.

D. SUMMARY

This chapter first discussed assessment results, to include demographics of the assessment respondents, buyer competencies, and seller competencies. It then provided a comparison of results with the competency assessments of other organizations. Finally, I discussed specific recommendations for LOGCOM leadership. The final chapter provides an overall summary of the research project, conclusion, and areas for further research.

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V. SUMMARY, CONCLUSION, AND AREAS FOR FURTHER RESEARCH

A.   INTRODUCTION

This chapter first provides a summary of the contract management competency assessment at LOGCOM. I then provide a conclusion to answer the research questions posed at the beginning of the report. Finally, I provide recommendations for areas for further research related to this project.

B.   SUMMARY

Contract management is a perennial staple on the DoD's high-risk list due to its complexity, impact, and risk to mission (GAO, 2013). Efforts to measure and improve education and training in contract management have been pursued in legislation and agency policy for decades (DAU, 2007). In 1990, DAWIA standardized the requirement for education and training for DoD personnel (Defense Acquisition Workforce Improvement Act, 1990). However, subsequent DoD Contracting Competency Models only focused on buyer competencies, to the neglect of seller competencies and did not reflect a concise contract life cycle approach (Rendon & Winn, 2017).

The FY2020 NDAA required the DoD to reform its Contracting Competency Model by basing it off a third-party accredited industry standard (National Defense Authorization Act, 2019). The DoD decided upon the ANSI-accredited CMS as its standard, choosing to implement the standard in its BtB program (Undersecretary of Defense for Acquisition and Sustainment, 2020). Noteworthy to this transition was the inclusion of industry standards—specifically, the CMS addresses both buyer and seller competencies.

Based on the CMS, Rendon developed a contract management competency assessment instrument to measure workforce proficiency in buyer competencies and knowledge of seller competencies (Rendon & Schwartz, 2021). Since the implementation of BtB, LOGCOM had not conducted a CMS-based assessment to determine its proficiency and knowledge of contract competencies.

The purpose of this research was to conduct an empirical assessment of the contract management workforce at LOGCOM. Data was collected of the workforce's self-assessment of their proficiency and knowledge of buyer and seller competencies, respectively. The results were analyzed and compared against CMS-based assessments of different organizations to identify patterns in training and education across multiple Marine Corps commands (Hayashi & Pfannenstiel, 2020; Hoover, 2021). Finally, targeted recommendations were provided to LOGCOM's senior leadership to address any gaps.

C.   CONCLUSION

This research was conducted with the goal of analyzing strengths and areas for improvement as they relate to the DoD's Contract Competency Model. The study contributed to a growing body of competency assessments of the contracting workforce at various commands. Results of the assessment were used to answer the research questions.

1. Based on the contract management competency assessment, in which competencies are LOGCOM's contracting personnel more proficient or knowledgeable?

The assessment revealed that respondents were, on average, most proficient in pre-award phase buyer competencies. The three highest proficiency ratings were in "Request Offer" (3.68), "Plan Solicitation" (3.56), and "Administer Contract" (3.54). Respondents were most knowledgeable, on average, of post-award phase seller competencies. The three highest knowledge ratings were in "Close Out Contract" (3.25), "Select Source" (3.17), and "Administer Contract" (3.16).

2. Based on the contract management competency assessment, in which competencies are LOGCOM's contracting personnel less proficient or knowledgeable?

The assessment revealed the respondents were, on average, least proficient in award-phase buyer competencies. The three lowest proficiency ratings were in "Manage Disagreement" (3.07), "Plan Negotiations" (3.12), and "Ensure Quality" (3.27). Respondents were least knowledgeable, on average, of pre-award phase seller competencies. The three lowest knowledge ratings were in "Manage Subcontracts" (2.83), "Manage Disagreement" (2.87), and "Prepare Offer" (2.89).

3. What training recommendations could be given to LOGCOM to improve their contracting workforce competencies?

Recommendations were separated into sustainment and improvement categories. For practices to sustain, recommendations include continuing to recruit and retain experienced contract management personnel, the sustainment of training and education in pre-award buyer competencies, and continuing to conduct periodic competency assessments to analyze trends in contract management competencies at LOGCOM over time. For recommendations for improvement, first, the command should pursue targeted training to address the award phase, which had the lowest proficiency ratings of the buyer competencies. Second, LOGCOM should encourage workforce members to pursue professional certifications in contract management. Third, LOGCOM should update its contract management training program to include significant focus on seller competencies. Finally, LOGCOM should provide targeted training on the lowest rated competencies, "Manage Disagreement," from both the buyer and seller's perspectives, and "Manage Subcontracts," from the seller's perspective.

D. AREAS FOR FURTHER RESEARCH

The Contracting Competency Assessment, based on the NCMA's CMS, provides a framework by which contracting activities may be assessed. The Contracting Competency Assessment has been applied across multiple DoD activities to begin to build a baseline of competency ratings since the implementation of BtB.

One related area for further research could be found in conducting competency assessments of different commands across the military. In this study, LOGCOM was compared to previous research on MCSC, an acquisition command, and the ECPs, contingency contracting commands (Hayashi & Pfannenstiel, 2020; Hoover, 2021). Additional value could be added by comparison to Army, Navy, or Air Force commands with similar missions, facilitating best practices across services.

Additionally, more competency assessments of the LOGCOM workforce in the future could help senior leaders evaluate the effectiveness of training modifications made in response to this research. Competency assessments of any of the other Marine Corps commands already surveyed could reveal similar patterns. Finally, another area of

research could be a meta-analysis of these studies to see if there is statistical significance between the collected workforce demographics and competency ratings. These recommendations for further research would provide senior leaders with needed data to improve the field of contract management.

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