



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

MBA PROFESSIONAL PROJECT

USMC SERVICE CONTRACTS: ANALYSIS OF PROCUREMENT REQUESTS WITHIN PR BUILDER

December 2020

**By: John K. Murphy
Samuel T. Perrine**

**Co-Advisor: Spencer T. Brien
Co-Advisor: E. Cory Yoder**

Approved for public release. Distribution is unlimited.

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC, 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2020	3. REPORT TYPE AND DATES COVERED MBA Professional Project		
4. TITLE AND SUBTITLE USMC SERVICE CONTRACTS: ANALYSIS OF PROCUREMENT REQUESTS WITHIN PR BUILDER			5. FUNDING NUMBERS	
6. AUTHOR(S) John K. Murphy and Samuel T. Perrine				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) The United States Marine Corps is heavily reliant upon various service contracts to conduct field and garrison activities. With an increase in the amount of service contracts requested by units, there are inefficiencies due to a lack of training for Marines interpreting requirements, determining whether requests are inherently governmental, and processing requests for their units. Additionally, there is a lack of competency across the Marine Corps regarding the purchase request (PR) process and Purchase Request Acquisition Lead Time (PRALT). Analyzing data from PR Builder, the requests for services can be broken down by type of service, dollar amount, and time for approval. This data provides analysts with a measurement for how responsive the service-contract PR process is for units with time-bound requirements. There is a potential for efficiencies to be gained and more responsive support to the warfighter if the process can be improved from the unit requesting the service and from the regional contracting office approving a request and fulfilling requirements. This project seeks to identify the issues associated with the problem of efficiently fulfilling service contract requests and provides recommendations to increase effectiveness of requests and minimize unnecessary risks to units.				
14. SUBJECT TERMS contracts, Marine Corps, procurement requests, services, PR Builder, acquisition, lead time			15. NUMBER OF PAGES 61	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release. Distribution is unlimited.

**USMC SERVICE CONTRACTS:
ANALYSIS OF PROCUREMENT REQUESTS WITHIN PR BUILDER**

John K. Murphy, Captain, United States Marine Corps
Samuel T. Perrine, Captain, United States Marine Corps

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

**NAVAL POSTGRADUATE SCHOOL
December 2020**

Approved by: Spencer T. Brien
Co-Advisor

E. Cory Yoder
Co-Advisor

Rene G. Rendon
Academic Associate, Graduate School of Defense Management

THIS PAGE INTENTIONALLY LEFT BLANK

USMC SERVICE CONTRACTS: ANALYSIS OF PROCUREMENT REQUESTS WITHIN PR BUILDER

ABSTRACT

The United States Marine Corps is heavily reliant upon various service contracts to conduct field and garrison activities. With an increase in the amount of service contracts requested by units, there are inefficiencies due to a lack of training for Marines interpreting requirements, determining whether requests are inherently governmental, and processing requests for their units. Additionally, there is a lack of competency across the Marine Corps regarding the purchase request (PR) process and Purchase Request Acquisition Lead Time (PRALT). Analyzing data from PR Builder, the requests for services can be broken down by type of service, dollar amount, and time for approval. This data provides analysts with a measurement for how responsive the service-contract PR process is for units with time-bound requirements. There is a potential for efficiencies to be gained and more responsive support to the warfighter if the process can be improved from the unit requesting the service and from the regional contracting office approving a request and fulfilling requirements. This project seeks to identify the issues associated with the problem of efficiently fulfilling service contract requests and provides recommendations to increase effectiveness of requests and minimize unnecessary risks to units.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	BACKGROUND	1
B.	PURPOSE	1
C.	RESEARCH QUESTIONS	2
1.	Primary Question.....	2
2.	Secondary Questions.....	2
D.	SCOPE AND LIMITATIONS	3
E.	ORGANIZATION OF THE STUDY	4
II.	BACKGROUND	5
A.	INTRODUCTION.....	5
B.	BACKGROUND	5
C.	SUMMARY	9
III.	LITERATURE REVIEW	11
A.	MCCOMAS, OLIVER, AND HARRINGTON (2007).....	11
B.	SCHAPPER, VEIGA MALTA, AND GILBERT (2006)	14
C.	PEGNATO (2003) AND ROMAN (2015)	15
D.	BRIEN AND HINE (2015) AND BROWN, POTOWSKI, AND VAN SLYKE (2010).....	21
E.	KANTNER AND LETTERLE (2019).....	22
F.	SUMMARY	23
IV.	DATA METHODOLOGY AND ANALYSIS	25
A.	METHODOLOGY	25
B.	ANALYSIS	28
1.	SERVICE CONTRACT TYPE	29
2.	MANAGERIAL AND ANALYTICAL ACTIVITY OUTSOURCING	31
3.	PERSONNEL SPECIALIZATION AND COMPETENCY.....	33
C.	SUMMARY	34
V.	CONCLUSIONS AND RECOMMENDATIONS.....	35
A.	RESEARCH QUESTION CONCLUSIONS.....	35
1.	Primary Question.....	35
2.	Secondary Questions.....	36

B.	RECOMMENDATIONS.....	38
C.	SUMMARY	40
LIST OF REFERENCES		43
INITIAL DISTRIBUTION LIST		45

LIST OF FIGURES

Figure 1.	Roles of Public Procurement Professionals. Source: Kantner and Letterle (2019).	7
Figure 2.	RCO-SW Process Flow. Source: McComas et al. (2007).	11
Figure 3.	DOD-Wide Acquisition of Service Taxonomy. Source: Assad (2012).	27
Figure 4.	DOD-Wide Acquisition of Supplies and Equipment (S&E) Taxonomy. Source: Assad (2012).....	28

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	Quality and Cycle Time. Source: McComas et al. (2007).....	13
Table 2.	Roles of Public Procurement Professionals. Source: Roman (2015).....	19
Table 3.	Public Procurement Professionals’ Self-Perceived Roles. Source: Roman (2015).	20
Table 4.	Service Contract Request Categories.....	29
Table 5.	Service Contract Request Time (Days).....	30

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

APSR	Accountable Property System of Record
CICA	Competition in Contracting Act
COR	Contracting Officer Representative
COTS	Commercial Off the Shelf
CPRG	Cost Pricing Reference Guide
DCCHB	Defense Contingency Contracting Handbook
DOD	Department of Defense
FAR	Federal Acquisition Regulation
FASA	Federal Acquisition Streamlining Act
FY	Fiscal Year
GCSS-MC	Global Combat Supply System – Marine Corps
MCB	Marine Corps Base
MilSpec	Military Specifications
PALT	Procurement Acquisition Lead Time
PoP	Period of Performance
PR	Purchase Request
PRALT	Purchase Request Acceptance Lead Time
RCO	Regional Contracting Office
RDD	Required Delivery Date
SAT	Simplified Acquisition Threshold
SDN	Standard Document Number
SoW	Statement of Work
SupO	Supply Officer
TALT	Total Acquisition Lead Time
USMC	United States Marine Corps
USN	United States Navy

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

The goal of this project is to improve the collective understanding of United States Marine Corps (USMC) procurement request (PR) lead-times, specifically for contracted services, and provide recommendations to improve the efficiency of the PR Builder request process for service contracts. This chapter of the project provides the foundation necessary to understand the target research questions, motivation behind the study, scope and limitations, and the overall organization of the study.

A. BACKGROUND

The USMC currently utilizes the PR Builder web-based system to input contracting requests for products and services. Individual units (at every level of command) use PR Builder to request goods and services as their requirements and needs arise. The system routes requests through a request management chain of approval to the USMC's associated regional contracting offices where they are vetted and processed for contracting and procurement actions to begin. This is the only system of record currently employed by the USMC to ensure the timely procurement of services required to accomplish training and operational objectives. With a variety of commercial service requirements for the USMC and Department of Defense (DOD) as a whole, there are numerous current contracts and regular requests for additional services and updates to current unit requirements.

B. PURPOSE

According to a 2018 Congressional Research Service report, the DOD spent roughly 41% of obligated contract funds on service contracts (Schwartz et al., 2018). With service contracts becoming increasingly prevalent within the DOD, special attention is required to ensure that stakeholders have a definite understanding of the types of contracts requested through PR Builder and the implications for the current system of requesting commercial services in support of USMC training and operations. The purpose of this project is to conduct an analysis of the current PR Builder request process for services to assess whether the current standards for procurement acquisition lead-time (PALT) are able to provide the responsiveness required to provide the using unit with the capabilities

it requires. Currently, there are varying times for the PR acceptance lead-time (PRALT), which occurs prior to approval from regional offices and the start of PALT. The variation of PRALT consists of various factors and is dependent on the type and category of services requested. If the factors can be identified and assessed, units could potentially gain efficiency and responsiveness in their ability to fulfill end-user requirements (Kantner & Letterle, 2019).

C. RESEARCH QUESTIONS

The research questions provide the targeted areas of this study and are listed following this paragraph. An analysis of the PR Builder requests for services assists in identifying the types of services requested and in determining whether the PRALT plays a major factor in the overall PALT associated with varying types of commercial services. Additionally, the secondary questions assess the possibility of the USMC losing abilities to manage functional areas in the future by relying on service contracts to fill capability gaps for training and operations. Last, the questions assess the Marines' specialization of fulfilling service requests via PR Builder and whether there are any indicators that some units are more proficient with PALT due to greater efficiency in the request process.

1. Primary Question

What is the scope of service activities that have been procured by the USMC through the PR Builder system over the last four years? What categories of services have been under contract? How do these classifications align with PALT and the number of rejected iterations of purchase order requests? Are there rejections associated with overall PALT length?

2. Secondary Questions

What managerial and analytic activities are outsourced through PR Builder? Do USMC service contracts contribute to a "hollowing out" and loss of internal management capacity, or are outsourced managerial and analytic activities an efficient way to procure managerial capacity (Milward and Provan, 2000)?

How is individual personnel specialization used to route purchase orders, and how does this impact the efficiency and effectiveness of purchase request processing?

D. SCOPE AND LIMITATIONS

The scope of this study builds off of a previous capstone research project by Korey Letterle and Paul Kantner (2019). Their research was conducted to assess the factors that influence PRALT and PALT overall for both product and service requests under the simplified acquisition threshold (SAT) for a given period of time. This study aims to utilize a sample of PR Builder requests for service contracts under the SAT to assess the USMC's ability to request certain types of commercial services based on category and type. Based on the variables within each request in the sample, the study identifies whether certain patterns exist that explain variation in the acceptance timeline for PRALT. This scope, coupled with recommendations, will provide the Marines with a way ahead to reduce PRALT for services and begin PALT at a quicker rate, which will allow for more responsive results for the warfighter. Utilizing data from the PR Builder engineering team, this project builds off of Kanter and Letterle (2019) to assess the filtered statistical information and provide stakeholders and interested parties with data to increase the capacity for units to conduct service contract acquisition below the SAT. More information regarding the data and analysis is presented in Chapter IV of this document (Kanter & Letterle (2019). A subsequent academic manuscript continuing this line of research is currently under peer-review (Brien, Letterle & Kantner 2020).

This study is limited by the data captured in the PR Builder system and archives. Additionally, the data utilized requires a limited sample of PRs from units during a specific period of time; it does not encompass any data from before 2016. Excel is the primary means of data analysis and organization for the study. Although this software does not provide the most robust capabilities for data analysis, it does provide a means to collect, filter, and assess the findings from the information provided by the PR Builder engineer team. The data pull also requires a filtering process to exclude multiple PRs for the same service at the same location and time; this filtering process limits the number of requests in the sample but improves the accuracy of the data by ensuring there are fewer duplicate

entries. Last, this study is limited by the data sourced from PR Builder by the Marines seeking contracted services. If services are acquired through joint contracting means or other methods of procurement, this study is not able to assess their request process.

E. ORGANIZATION OF THE STUDY

The thesis has five chapters. Chapter I introduced the topic of the project, which is to improve the institutional understanding of the scope of Marine Corps PR lead-times for services and to examine whether the services are contributing to a “hollowing out” of key functions within the USMC. Chapter II provides the necessary background information into the current status quo of the Marine Corps’ procurement of services, specifically, the process through which the service requests are routed through PR Builder and the types of services that units at all levels are requesting. Chapter III includes a literature review of relevant articles and publications that provide context and contribute to the existing body of knowledge that will aid in the understanding of current Marine Corps acquisition practices and proposed solutions. Chapter IV contains a focused analysis of PR Builder data from the previous four years and a discussion of the methodology used to interpret the findings. Chapter V concludes the project and provides recommendations based on the findings (Milward and Provan, 2000).

II. BACKGROUND

A. INTRODUCTION

This chapter provides readers with the foundational information required to understand the scope of Marine Corps services procurement at all levels and with insight on how type of service classification may affect the PALT period. Furthermore, the detrimental effect of the “hollowing out” phenomenon is discussed (Milward and Provan, 2000).

B. BACKGROUND

Although each branch of the DOD conducts service acquisition and contract management, obtaining detailed information on a specific DOD component’s service acquisition request process can be difficult. Furthermore, there are few tools and strategies for measuring the effectiveness and efficiency of the service acquisition request process. This gap in institutional knowledge is why more study and analysis of the efficiency of Marine Corps service acquisition request processes are needed. Ideally, the Marine Corps service request example (much smaller than other DOD branches) could serve as a model for other agencies to assess their request processes. The PRALT timeline (consisting of the procurement request) occurring prior to PALT and the beginning of official contract acquisition actions is an important step that could be the difference between effective contract execution and missing an opportunity to provide warfighter support, installation support, or other critical needs (Kanter & Letterle, 2019).

Before discussing aspects affecting acquisition lead-times, the Marine Corps’ PR process must be understood. If a requesting unit wishes to procure a service, the request must be routed through a PR. The Marine Corps’ current Accountable Property System of Record (APSR) for routing such requests is PR Builder. The Marine Corps Installation National Capital Region’s Regional Contracting Office describes PR Builder as “a web-based Procurement Request tool which makes it easy to generate, track, and process PRs and funding documents from anywhere in the world where Internet access is available” (USMC MCINCR-RCO, 2020).

As a whole, the PR Builder process and system provides units with a number of advantages; however, as we discuss later in the project, the system is not being used to its full potential due to a variety of factors. PR Builder allows individual units to customize workflows to follow appropriate lines of clearances and permissions. Furthermore, PR Builder interfaces directly with the Standard Accounting, Budgeting, And Reporting System (SABRS) to automatically commit funds to supply and service providers once the request is approved and accepted. PR Builder also has the additional capability of directly interfacing with the Standard Procurement System (SPS). SPS is the standard contract writing system for the DOD and can save time in the contracting process by automatically inputting CLIN data in the SPS inbox with funding information (USMC MCINCR-RCO, 2020).

As advertised, once a PR Builder has been submitted, the routing process can take up to 5 days, though, in reality, this time frame differs drastically. The PR will then be automatically routed to SABRS for funds to be committed. Once approved, the PR is then sent to the Regional Contracting Office (RCO) for a thorough review for accuracy. If the PR is approved at this point in the workflow, the RCO will accept it and the process for obtaining the procurement will begin. It is important to note that at any time in the workflow, the PR can be rejected for a multitude of reasons (USMC MCINCR-RCO, 2020).

Although typical service requests submitted through PR Builder are relatively low in dollar value, the Marine Corps and DOD as a whole are spending increasingly more funds on service contracts. Government spending on service contracts has increased exponentially during the past 20 years of the budgeting process and through various policy changes in the roles played by the DOD services and by contractors to assist in the National Defense Strategy. In 2017, the U.S. government budgeted \$507 billion towards contract obligations, and of that \$507 billion, 65% was for the DOD. Of the \$329.5 billion the DOD utilized for contract obligations, 41% was obligated specifically for service contracts. With \$135 billion of U.S. taxpayer dollars at stake in 2017, understanding this topic of how much and what type of services are being utilized becomes very relevant and important to ensure fiscal responsibility of the procurement stakeholders. Additionally, with billions of dollars

involved for service contract actions, detailed research is necessary in order to understand how various requests are approved, and better understand any time differentiations in PRALT, and if the current request systems are providing responsive means necessary to ensure contract service support that does not interfere with or detract from the military's ability to manage its personnel and equipment (Schwartz et al., 2018).

Building on the previous research study conducted on PRALT and PALT, this project conducts further analysis with additional data from an extended time period but focuses only on contracted services. The total acquisition lead-time (TALT) consists of both PRALT and PALT. (see Figure 1). As Marine Corps units develop potential service requirements, the end user needs are interpreted by the unit's contracting office or supply representative and entered into PR Builder by the unit representative. This begins PRALT, as the PR is routed to various levels before reaching a regional contract office representative who either approves or rejects the PR.

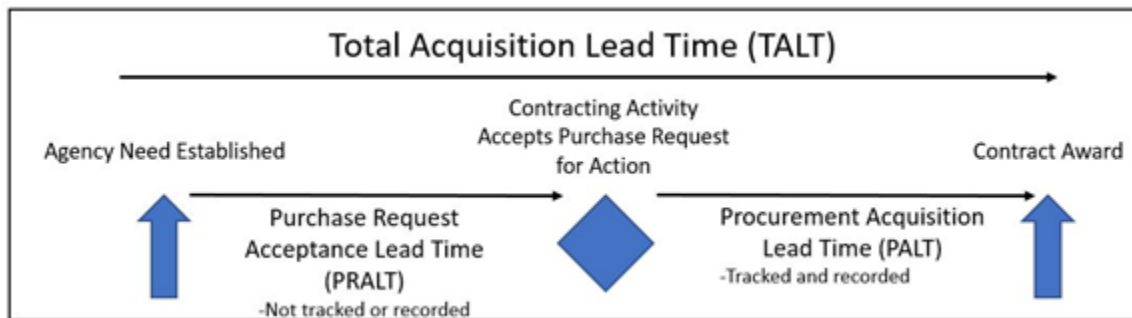


Figure 1. Roles of Public Procurement Professionals. Source: Kantner and Letterle (2019).

When PRs are rejected, the person (unit) who originated the request must edit and resubmit their request information in order to repeat the process and gain approval from the regional contracting activity. Once the regional office approves a PR, PALT begins, and contract actions begin taking place in accordance with the Federal Acquisition Regulation (FAR) competition and solicitation requirements depending on the value of the services required.

As stated previously, if requests are rejected and unable to begin the PALT process, the amount of overall time needed to acquire services is much longer. When units are unable to source service contract requirements in a timely manner due to a TALT that exceeds the threshold of acceptable time, there are significant effects on training, readiness, and mission success. Canceled training exercises, delayed combat support request actions, and failed inspections for safety and serviceability are some of the consequences for unnecessarily long TALT. This study's objective is to provide recommendations on how to limit rejected requests and enable a more efficient request process that provides units with a greater ability to source service contracts for bona fide requirements and needs (Kantner & Letterle, 2019).

One of the questions posed in our project is whether the scope of Marine Corps service contracts is contributing to a "hollowing out" of key functions within the organization leading it to becoming a "Hollow State." The notion of hollow is derived from several sources from *The Economist* to *Business Week* and even to the poet T. S. Eliot (Milward & Provan, 2000). In their work "Governing the Hollow State," Milward and Provan (2000) defined the hollow state as "Any joint production situation where a governmental agency relies on others (firms, nonprofits, or other governmental agencies) to jointly deliver public services. ... It refers to a government that as a matter of public policy has chosen to contract all its production capability to third parties" (p. 362). The parallel can be drawn directly from the state to the Marine Corps. Instead of public services, we attempt to determine whether the Marine Corps has a trend of contracting its key services to firms instead of retaining them as organic assets.

For any government entity, not just the Marine Corps, to become hollowed out is problematic. Even though the United States and other countries around the globe have an increasing reliance on contracted services, one would assume that the benefits would be readily apparent. This is not the case. The movement away from federal employees providing services to contracted private sector employees providing the same service has many difficulties in gauging effectiveness. Specifically, there are enough serious concerns about effective management and oversight of large service contracts that the GAO and media "regularly report failure of federal government agencies to effectively monitor and

control their contractors” (Milward & Provan, 2000, p. 362), which ultimately wastes tax dollars.

The scope and regularity with which the Marine Corps contracts services needs to be understood so the organization as a whole can remain effective with what it has organically. Contracted services should be kept to the smallest amount practicable. At a certain point, the delegation of governmental authority to civilian contractors erodes the government’s ability to manage the contractors and take back the delegated authority if the need arises (Heinrich et al. 2013). The situation in which the Marine Corps is reliant on service contracts for everything except the infantryman pulling the trigger in combat should be avoided at all costs.

C. SUMMARY

This chapter provided an overview of the problems related to service contract requests associated with PR Builder. Additionally, the chapter focused on providing background information for TALT which consists of PALT and PRALT. Lastly, the chapter identified issues with government agencies’ reliance on service contracts and accountability concerns of the “hollow state.” Chapter III provides a literature review of reliable service contract request publications (Milward and Provan, 2000).

THIS PAGE INTENTIONALLY LEFT BLANK

III. LITERATURE REVIEW

A. MCCOMAS, OLIVER, AND HARRINGTON (2007)

A review of relevant literature for the project indicated that there was a lack of content focusing on factors contributing to PRALT other than Kanter and Letterle's (2019) work. McComas et al.'s (2007) MBA professional report entitled "Analyses of the United States Marine Corps Continuous Process Improvement Program Applied to the Contracting Process at Marine Corps Regional Contracting Office – Southwest" offered an examination of PALT through the lens of Continuous Process Improvement (CPI) and Lean Six Sigma (LSS). Although this study focuses on PALT through LSS and CPI, it is the only study that contributes to the PRALT methodology (Kantner & Letterle, 2019, p. 13). McComas et al.'s (2007) analyses of contracting actions began at customer planning and concluded at post-contract award process (McComas et al., 2007, p. 54). This process can be seen in Figure 2.

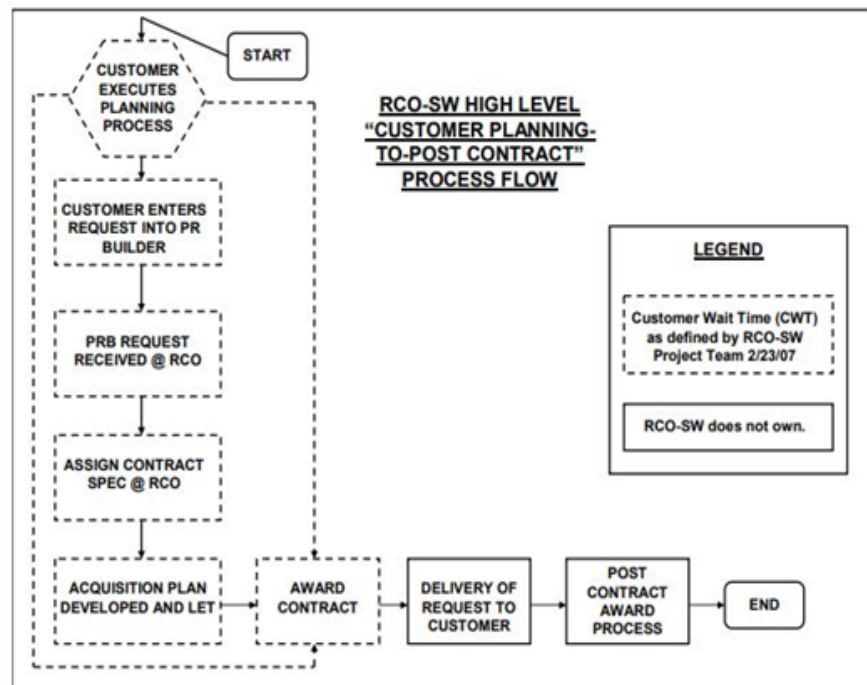


Figure 2. RCO-SW Process Flow. Source: McComas et al. (2007).

As shown in Figure 2, McComas et al. (2007) illustrated the six elements contributing to PALT:

Customer executes planning process
Customer enters request into PR Builder
PR Request Received at RCO
Assign contract specialist at RCO
Acquisition Plan Developed
Contract award

McComas et al. (2007) posited that traditional PALT measurements do not typically include customer planning. However, customer planning was added to their study as a critical component of the process flow because “the end user or customer is often not the individual that enters the request data into PR Builder” (McComas et al., 2007), leading to increased PALT/PRALT and decreased efficiency. Despite the importance of the customer’s planning process in the overall efficiency of the procurement process, this study, like that of Kanter and Letterle (2019), recognizes that PALT starts when the contracting office receives a package from the end user for action.

To determine where to focus effort to shorten cycle-time, the CPI team utilized a survey that was disseminated to units falling under the purview of RCO-SW (McComas et al., 2007). The CPI team found a number of causes that increased cycle-times, decreased efficiency, and produced frustration among RCO-SW’s customer base. Most notable were an inability to properly define requirements on a Performance Work Statement (PWS) or Statement of Objective (SOW), lack of knowledge of procurement regulations, improper data entry, and improper use of PR Builder (McComas et al., 2007). The survey results exposed the root of frustration:

Of the units surveyed (I MEF, Base, 1st Mar Div, 3rd MAW, MCAS, Tenant, Other) 74% responded.

- 65% stated that the product or service they receive meets their requirements.
- 35% stated it was “easy” to submit a purchase request to RCO-SW.

- 23% stated they had a complete understanding of the role of RCO-SW in the procurement process.
 - 68% stated using PR Builder was the most challenging step in the procurement process.
 - 32% stated they engage RCO-SW in their process at initial planning.
- (McComas et al., 2007, p. 59)

The results of this study show the incomplete knowledge of the procurement professionals who must interact with PR Builder. Unfamiliarity with the system mixed with an incomplete knowledge of mandatory procurement regulation leads to a request that is returned, on average, at least one time (1.08 times, to be exact; Kantner & Letterle, 2019). McComas et al. (2007) provided the breakdown shown in Table 1.

Table 1. Quality and Cycle Time. Source: McComas et al. (2007).

Dollar range	Average Value	Average Days in System	Average # of Returns
\$0 – 9,999	\$5,518	15.42	1.0
\$10,000 – 25,000	\$16,911	6.82	.65
\$25,001 – 50,000	\$31,824	6.50	.50
\$50,001 – 100,000	\$65,831	11.83	1.83
\$100,001 – 300,000	\$172,602	7.33	.67
\$300,001 - \$520,000	\$379,396	21.60	1.80

These numbers are indicative of an overarching training deficiency. However, it is important to note that McComas et al. published this report in 2007. PR Builder became the Marine Corps' APSR for all purchases outside of GCSS-MC in 2015 (Kantner & Letterle, 2019). Since 2015, PR Builder has most likely become more effective and

navigable to those tasked with using it because the institutional knowledge base for the system has presumably increased with mandatory usage.

B. SCHAPPER, VEIGA MALTA, AND GILBERT (2006)

Schapper et al. (2006) examined the interconnected nature of the political and procurement systems and showed that public procurement garners widespread attention from the public because the public, with their tax dollars, are the ones funding public procurements. Schapper et al. (2006) further posited that inefficiencies in public procurement are often driven by a “lack of understanding of the basic elements of procurement” (Schapper et al., 2006, p. 13) by procurement professionals. Schapper et al. (2006), as well as Pegnato (2003), accepted that there are political consequences when tinkering with the procurement system and realize that the inherent inefficiencies within the system are acknowledged, yet accepted, because they have not reached a critical mass that warrants change (Kantner & Letterle, 2019; Pegnato, 2003; Schapper et al., 2006).

Schapper et al. (2006) is especially useful in examining how politics affects PRALT. For procurement professionals to be effective, there must be a firm institutional knowledge they can rely on. However, mandated procurement procedures often shift, leaving procurement professionals in a constant state of flux (Schapper et al., 2006). The constant changes in procedure affects non-procurement individuals who are not well versed in the timelines, challenges, and lead times associated with contracting and procurement as well, resulting in lengthened timelines and an inability for inexperienced people to navigate the procurement system effectively (Kantner & Letterle, 2019).

Schapper et al. (2006) proposed regulations, management, and centralization is a means of overseeing government regulation (Kantner & Letterle, 2019; Schapper et al., 2006). The United States uses a regulatory approach. In a regulatory approach, risk is mitigated by adherence to strict procedural rules that must be followed. The United States emphasizes properly allocating funds and reducing misspending to prevent the subsequent political fallout associated with the squandering of taxpayer dollars. However, the highly regulated process is somewhat of a double-edged sword. The high amounts of bureaucratic regulation that are placed to protect tax dollar accountability result in an inefficient and

complicated process that yields poor performance (Kantner & Letterle, 2019; Schapper et al., 2006).

Even though the United States follows a regulatory approach, there was a shift in the 1990s that began to move in the direction of decentralization with the use of purchase cards for low dollar purchases (Kantner & Letterle, 2019). Decentralization in this fashion eased the regulatory framework and internal controls for high-volume, low-cost items like office supplies (Schapper et al., 2006). This allowed for more expedient delivery of items with less oversight and generally less expertise needed by those executing the procurement. Despite decentralization making low-cost, high-demand purchases more streamlined, high-cost, low-demand items still require a more regulated approach that cannot necessarily be decentralized because of the risk involved with the purchases and the expertise needed by those executing the procurement (Schapper et al., 2006).

The final contribution Schapper et al.'s (2006) research makes to our project is the notion of how technology bolsters the “transparency of the process, efficiency, and policy coherence” (Schapper et al., 2006, p. 18). This, perhaps, is the area that can best reduce PRALT. As Kanter and Letterle (2019) noted, “Using electronic means that streamline communications between agencies and procurement professionals can speed up the process, increase transparency, and reduce risk” (p. 20). Training a procurement workforce on a stabilized procurement policy coupled with adequate education on how to utilize electronic systems (PR Builder, for our purposes) will be the most advantageous approach to reducing PRALT and delivering capabilities to the end user.

C. PEGNATO (2003) AND ROMAN (2015)

Various research provides context to the rate at which PRs are approved. Two sources that this project focuses on are Pegnato (2003) and Roman (2015). These researchers focused on the regulation fluctuations and human factors that identify each procurement specialist's outlook for procurement activities, including the request process. Human behavior and regulation changes are closely tied to one another as various political events, national mood swings, agenda changes, and other major U.S. events (directly or

indirectly) alter the rate at which PRs can be approved by the appropriate authorities within an approval chain (Kantner & Letterle, 2019).

Pegnato (2003) discussed variations in the amount of required regulations during time of war and peacetime operations. This research project does not provide specific context for PALT or PRALT, but it provides additional context and reasoning for the difference in procurement lead-times required and assists with interpreting why some requests are quickly approved while others require additional time before acceptance and approval. During times of low operational tempo and peacetime operations, the legal constraints were greater and resulted in more reluctance for procurement personnel to quickly approve any requests that were not very well defined (Pegnato, 2003). This involves the requirements holder to ensure that their requests are extremely specific and understood by all parties involved in order to ensure efficient approval process. The times of increased regulation also relate to Roman's (2015) research and imply that the behavior of procurement professionals from person to person is distinct and varying depending on the person, office, and climate of procurement regulations. Similar to the behavior aspect, Pegnato's work discusses whether any procurement amendments are enduring or whether the government procurement system is always in a state of flux due to the changing agendas, policies, and operational context (Kantner & Letterle, 2019; Pegnato, 2003; Roman, 2015).

Examples of regulation fluctuations provided by Pegnato (2003) are World War I and World War II. During these major conflicts, the rules surrounding procurement activities were relaxed, only to be quickly tightened once a peace agreement was made by the nations involved (Pegnato, 2003). Pegnato discussed the reasoning behind loosened regulations and the possibility for increased scandals due to the lack of clarity during wartime operations. However, the argument is made that in times of greater restrictions, the reduced efficiency and enforcement of standards is more costly for the procurement activity in general (Pegnato, 2003). The ultimate goal for government contracting personnel is to ensure an increased efficiency of procurement activities through the use of commercial items, more flexible monetary transactions like government purchase cards, and reduced paperwork involved during contracting functions. These tools were achieved

through the approval of the Federal Acquisition Streamlining Act (FASA) of 1994 and the Clinger–Cohen Act of 1996 (Pegnato, 2003). Commercial-off-the-shelf (COTS) items and other incentives for efficient contracting saved the procurement professionals time by not requiring the development or purchase of more complicated and less readily available military-type items (Kantner & Letterle, 2019; Pegnato, 2003).

Although there were some major benefits from contracting reform in the 1990s, there were also negative aspects that decreased the efficiency and responsiveness of contracting functions. Although performance-based contracts allowed greatly flexibility for contractors to work and perform services using industry standards as a metric, the contract requests for proposals and contracts themselves were difficult to develop and manage from an administrative perspective. This additional lack of competency by contracting professionals led to a 16% increase in procurement lead-time, despite the performance-based contracts providing better value to the government overall (Pegnato, 2003). This notion of a lack of understanding and awareness is very similar to the personnel factors viewed in Marine Corps battalions, regiments, and squadrons alike. Due to the very high turnover rate of procurement personnel and supply chain managers in Marine units, there is a lack of training and awareness of the PR processes that leads to a decreased efficiency in PRs. This is directly correlated to requests lacking clarifying information required by regional offices for approval. Without the keen knowledge of the requirements interpreters generating the initial request for proposal information correctly, there will always be delays and decreased responsiveness of contracting practices (Kantner & Letterle, 2019).

Pegnato (2003) concluded that regulation reform is beneficial but that any change made is not permanent. The culture and mood of government agencies is one that is extremely risk-averse and difficult to make and justify calculated risk. Historically, like all other government-related incidents, when a procurement scandal occurs, it results in a change of regulations to deter the action in the future (Pegnato, 2003). This area of research directly relates to the human behavior aspect of PRs. Understanding the motivation behind the professionals' labor to produce goods and services for the end user is beneficial to assessing where efficiencies in the PR process can be gained (Kantner & Letterle, 2019).

Another key area of interest when determining efficiencies in the PR process is the human behavior aspect of the professionals facilitating contract administration functions Alexandru Roman (2015). researched the information regarding contract specialists' behavior and how they perceive their role in government contract requests. One of the key areas of research was determining if contract specialists play a role in any decision-making during contract procurement or if they are there to follow the rules and act as "enforcers of procurement ordinances" (Roman, 2015, p. 39). The human behavior aspect is closely tied to the thoroughness of the training provided to procure goods and services and the regulations for various contract types (Kantner & Letterle, 2019).

Roman (2015) worked to assess whether there are assigned administrative roles for contracting personnel and the consequences of certain types of behavior. After analyzing current literature similar to the subject and a framework based on Selden et al. (1999), Roman (2015) produced the administrative roles shown in Table 2. These administrative roles were used to determine the self-identification of contract specialists as seen below in Table 2 (Kantner & Letterle, 2019; Roman, 2015, p. 42).

Table 2. Roles of Public Procurement Professionals. Source: Roman (2015).

Administrative Roles	
Role	Role description
Stewards of the Public Interest	They search for opportunities to participate in the formulation of "good" public policy. A "good" public policy is one that incorporates the needs of all citizens. They are committed to social and political goals, and policy efficiency is not a priority. They see themselves as serving the public and furthering the public interest, independent of perspectives of management or elected public officials.
Adapted Realists	They seek to balance equity and fairness. They are committed to both effective management and equity considerations. They reject the general value of neutrality, but they also recognize that they must work within the constraints imposed by the system in order to survive in a bureaucracy.
Businesslike Utilitarians	They value efficiency as an organizational and individual goal. When faced with a decision, they will opt for the most efficient solution. They do not make exaggerated claims and reject any politicization of their role. They do not seek to further the interest of those less privileged or minority citizens. They are ambivalent about their relationship with elected public officials.
Resigned Custodians	They see themselves as neutral agents, who know their boundaries. They work within the rules and the expectations of supervisors and elected public officials. They feel no inclination to play a mediator role between elected and nonelected officials.
Practical Idealists	They see themselves as highly responsible and professional. They work efficiently and accurately while also advocating policy positions and legislation in the public interest. They do not see themselves as agents of elected officials. They reject neutrality, but also the politicization of the public service.

Utilizing a survey originally created by Selden et al. (1999), Roman (2015) updated the verbiage for a modern audience and administered the test to a random sample of 2,000 National Institute of Government Purchasing (NGIP) members (Roman, 2015). Using a seven-point Likert scale, Roman (2015) assessed the results in Table 3 (p. 46).

Table 3. Public Procurement Professionals' Self-Perceived Roles. Source: Roman (2015).

Role	Frequency	Percent
Practical Idealist	150	30.40%
Adapted Realist	143	29.00%
Steward of Public Interest	97	19.70%
Resigned Custodian	68	13.80%
Businesslike Utilitarian	35	7.10%
Total	493	100%

The results of the survey revealed that most respondents did not feel they were simply following the rules and regulations set forth in order to be neutral in the process of contract procurement and management. Most replies indicated that procurement specialists identified as “Practical Idealists” or “Adapted Realists” (Roman, 2015, p. 50). This result exposed that respondents are interested in establishing policies grounded in common sense and efficiency, rather than blindly following the rules and potentially creating an inefficient process as a result. Although there were limitations to the experiment that may have limited the preciseness of the results, the study provided insight into an area of procurement specialist behavior that had yet to be discovered previously (Kantner & Letterle, 2019; Roman, 2015).

Despite the fact that Roman (2015) does not relate directly to the acceptance rate of PRs, this study is valuable and provides a measured response of contract specialists' commitment to the process. This commitment suggests that the request process occurs in a balanced environment where actors are working in the best interest of the institution to ensure capabilities can be brought to the end user in the most effective and efficient manner possible. The balanced environment is an example of evidence that the sample of results gathered during the evaluation of PRALT are consistent throughout the government procurement activities occurring elsewhere.

D. BRIEN AND HINE (2015) AND BROWN, POTOWSKI, AND VAN SLYKE (2010)

There is published research that relates specifically to the nature of complex service agreements and the negative effects that complex products can have on all parties involved in the contracting process. Although this research project is not reflected directly through the data analysis and recommendation chapters of this study, it is an interlinked portion of the Marine Corps' requests for services. This relationship of complex service agreements sheds light on the areas of PRALT where efficiencies can be gained through simplification and decreasing risk to both buyer and seller (Brien & Hine, 2015; Brown et al., 2010). One of the areas main areas of interest for this study is to determine what type of service requests the Marines are implementing and if a bundle of capabilities is potentially diminishing the quality, value, and responsiveness of the contract due to the inability to accurately establish all terms and conditions of the contract. Additionally, when the service contracts become more complicated with multiple capabilities in the same request, the criteria of allowable and appropriate vendors able to provide all requested services decreases. As the number of applicable vendors decreases, so does the competition of the solicitation. This increases the opportunity for a contractor to provide services of less value to the government while still maintaining a need due to a lack of available competitors (Brien & Hine, 2015).

Brien and Hine (2015) explored the miscommunication that occurs between the principal and agent and the rippling effect it has on the contract agreement. If a breakdown in communication occurs between the parties, there are negative consequences in the refinement, responsiveness, cost allocation, and overall administration of a service contract. Clear communication is vitally important to every function within the Marine Corps processes. In particular, when determining the end users' needs, the stakeholders must ensure that they include a detailed depiction of all quantitative and qualitative data in order for a service contract request to be approved within the PR Builder system. With multiple links in the approval chain, any level of ambiguity can lead to delays in the request approval process and decreased responsiveness to the unit with an operational or training requirement (Brien & Hine, 2015).

Overall, both Brien and Hine (2015) and Brown et al., (2010) explore the overcomplication of many contracts and the lock-in of investment that requires one or both parties to endure a poor business transaction to achieve the value sought from the contracted product or service. The aim of this research is to assess the PR Builder data as a model of where the Marines can achieve greater value and responsiveness of the Marine Corps' contracted services. Simplifying the process by informing, training, and communicating with the end users, request input personnel, and contracting professionals is the starting point. Ensuring that the DOD is not exacerbating the already complicated nature of federal outsourcing to the private sector requires the decreased focus on complex bundled products and services and greater focus on the requirements that will fulfill the requirement in a responsive and valuable manner (Brien & Hine, 2015; Brown et al., 2010).

E. KANTNER AND LETTERLE (2019)

The final section of the literature review covers the research performed by Kantner and Letterle (2019). Our research utilized a similar analysis approach and builds off the previous thesis research in order to better define the type and scope of service contracts (below the SAT threshold) requested by Marine Corps units. Utilizing Kantner and Letterle (2019) we gained a greater understanding of PRALT's effect on PALT, TALT, and the factors and situations that can increase or decrease the responsiveness of purchase requests within PR Builder. In order to increase the efficiency of Marine's purchase requests, we first needed to understand and breakdown the request process. Once the process is broken down and all levels of approval are exposed researchers can then evaluate the ability for requests to flow through the process and provide an answer for the rate at which requests are approved (Kantner & Letterle, 2019).

Kantner and Letterle (2019) focus concerned the timeliness of the request process. The researched focused attention on the lead time required for the request process and what factors at the unit level and regional contracting office influenced inconsistencies with approval time frames. Although some attention was given to products versus services, there were limitations and differences in the data that did not allow for complete accuracy and transparency when comparing requests. The deciding factor for data comparing services

and products in their research was period or performance (POP) or required delivery date (RDD) fields within PR Builder. Despite this system there were discrepancies in the data that did not allow for complete accuracy. Building off Kantner and Letterle (2019) we chose to focus solely on service contract requests and assess the accuracy of information in the system in order to categorize the data and determine its completeness and accuracy. Utilizing the previous research to base our approach this work provided the foundation for further research to be conducted and categorize the PR Builder data to provide feedback to stakeholders and decision makers on the type, amount, and reasoning for current and previous USMC service contract requests (Kantner & Letterle, 2019).

Another question of interest pursued in the Kantner and Letterle (2019) research involved the external factors of time of year for contract request and operational tempo. These two factors played a role in the research by determining if the annual budgeting cycle influenced when units could pursue contract request for goods and services. During each fiscal year (FY) rotation there is increasing focus at every unit to spend the available funds remaining or resist spending until funds were renewed at the beginning of the new FY. Additionally, their research pursued the difference of request approval in years with continuing resolutions that could possibly delay request approval or stretch TALT due to short funds. Lastly, the research pursued the efficiency of units that submitted multiple requests or more requests than average and if this played a factor on the efficiency of the process. All these areas provided valuable insight and posed questions that required data analysis to assess the trends of the request process in various times of year and funding circumstances. There are numerous factors in play for good and service requests within PR Builder, analyzing the lead time required and areas where efficiencies can be gained is a worthwhile endeavor to provide contract support to using units with increasing responsiveness (Kantner & Letterle, 2019).

F. SUMMARY

This chapter offers background information derived from other research in the contract and acquisition fields. These authors provide context for the acquisition of goods and services during varying conditions and times. Some of the research is closely related

to the request process while other research in the literature review provided additional perspective. The following chapter is dedicated to the analysis of the PR Builder used for our research project and the methodology used to interpret the results of the information available.

IV. DATA METHODOLOGY AND ANALYSIS

This chapter examines the methods used to filter the raw data provided from the PR Builder office and provides an analysis of results. Initially, the data pulled from the PR Builder office included a similar array of random PR Builder requests to the Kantner and Letterle (2019) research. The data utilized for our research included requests from FY 2016 – 2019. Once the data was retrieved and reviewed, it was cleaned and sorted in the process spelled out in the following paragraphs of this section. Once filtered and sorted the results were explored and presented trends in the data that revealed answers to the main research questions of this project.

A. METHODOLOGY

In order to reach the point of effective evaluation, the data received from the PR Builder system required multiple rounds of filtering and focusing in order to be appropriate for the use of this research study. The process used to understand and clean the data is examined in the following sections.

The data used for this study was retrieved from the PR Builder system. Several employees of Deloitte Consulting LLP were instrumental in helping us access the purchase request records and filter specified results to assist in our study. After making initial contact with the Deloitte team and introducing our study as a follow-on research to Kantner and Letterle (2019) we requested a data pull sample of 2,000 requests with the following parameters:

Limited sampling of 2,000 documents across multiple Department of Defense Activity Address Codes (DoDAAC). The DoDAAC information was redacted prior to data filtering in order to preserve operational security and privacy concerns.

- Fiscal Year 2016–2019
- Requests valued at \$250,000 or less (below the SAT) (FAR 2.101)
- Approved and disapproved documents only
- Report generation in Excel file format

Once the 2,000 records were received the filtering process began in order to delineate between usable, valid information for the study and unnecessary documents that did not apply to the scope of the research. After processing the data and breaking down each parameter used by PR Builder to organize contracting PRs, the study focused on several key record identifiers. Standard Document Number (SDN) is the system's tool for associating an identifier with each request and the history of actions that occur with every action taken by the originator or RCO personnel. Once the SDN associator was understood, the document was filtered to discover that there were only 337 unique SDNs. The original assumption was that each line item in the Excel document requested represented a unique request, however this was not the case. Despite requesting 2,000 records there was a relatively smaller pull of PR information to utilize for this project. However, within the SDNs there were additional line items for separate goods and services. In order to achieve the most thorough level of analysis SDNs with multiple varying requests were included to increase the results of the study.

After merging data fields and eliminating results that were outside the scope of the project (above the SAT, duplicated SDN irrelevant to the study, etc.) there were 558 SDN line items to sort into the categories of commodity and service. Despite the option to indicate whether a request is a commodity or service, the PRs for services were generally inaccurately represented as commodities in the data pulled from PR Builder. Additionally, although some requests were for commodities there were service line items associated or required in order to execute the contract successfully. These service line items associated with goods were included in the filtering process. After completing the service vs. commodity sorting process, there were 232 service PRs in the provided data. The sorting process utilized the "PR_Name" and "Line_Item_Description" fields as the primary means to determine service or commodity. Due to the lack of certainty in the "Item_Type" field, it could not be used to accurately filter between the classifications of commodity or service. Once the service PRs were identified, we conducted another iteration of cleaning and filtering. After this process we discovered that there were duplicate, identical SDNs for the service requests identified. The duplicate information was eliminated from the file in order to avoid a skew of false data analysis that misrepresented the spread of service

classifications requested by USMC units under the SAT. After the final round of data cleansing, the study was left with 164 line items that were used to determine the types of services being requested. The following section outlines the methods used to determine the various types of service requests found in the data.

To Classify the PR Builder data we received from Deloitte Consulting LLP, we used the DOD Wide Acquisition of Services Taxonomy that was outlined in a 2012 memorandum from the Office of the Under Secretary of Defense (Assad, 2012). The Taxonomy was created to increase interoperability and promote coordination within members of the DOD workforce and their customers (Assad, 2012). Services, supplies, and equipment are organized into categories that outline Product Service Codes (PSC), as they are in the Federal Procurement Data System Product and Service Code Manual (Assad, 2012). The DOD has used this taxonomy for a number of years to better support the strategic sourcing and the USD(AT&L) Better Buying Power initiatives (Assad, 2012). The full taxonomy of services, supplies, and equipment can be seen in Figures 3 and 4.

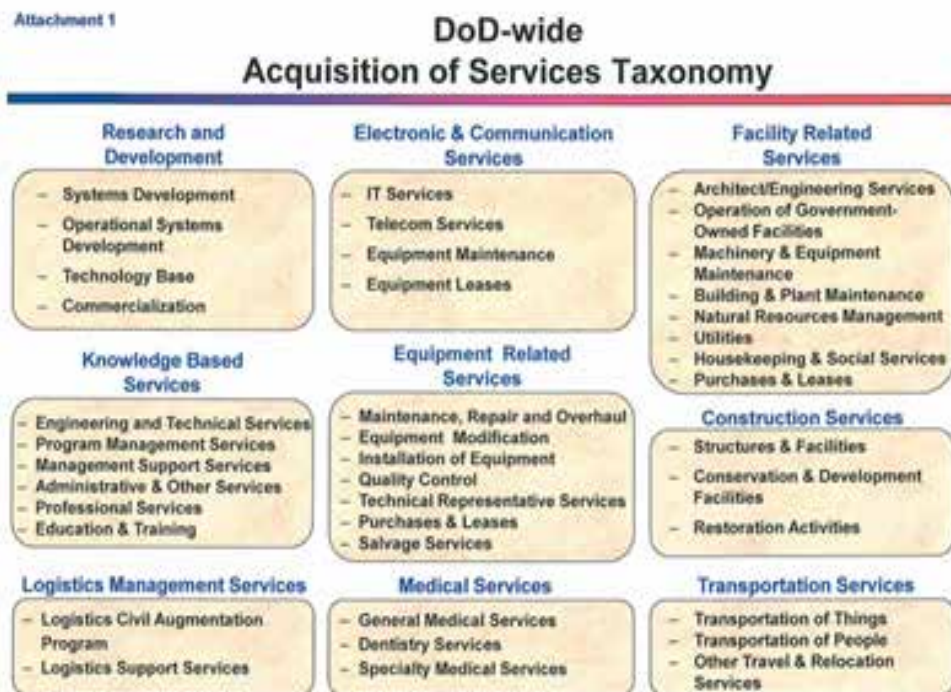


Figure 3. DOD-Wide Acquisition of Service Taxonomy. Source: Assad (2012).



Figure 4. DOD-Wide Acquisition of Supplies and Equipment (S&E) Taxonomy. Source: Assad (2012).

The taxonomy contains 16 portfolio groups and 70 subsections within the portfolios. The memorandum (Assad, 2012) asserts that analyses based on the taxonomy provides significant insight into the “marketplace and organizational buying behaviors” in addition to allowing for spend analysis that allows the DOD to create “significant cost savings, leverage economies of scale, employ demand management principles and draw attention procurement best practices” (Assad, 2012). We intended to classify the PR data we received into the 9 categories of the services taxonomy. From there, our goal was to determine if longer or shorter PALT lengths are correlated to what types of services are being contracted.

B. ANALYSIS

After cleaning and filtering the data, the results yielded usable data points for both the type of service contracts that were requested and the quantity of the various categories. The following sections provide detailed analysis of the quantitative study and the PR Builder data results.

1. SERVICE CONTRACT TYPE

For the scope of this research, only service type contracts were analyzed and classified according to the DOD-Wide Acquisition of Service Taxonomy in Figure 2. Of the 2,000 randomly selected PR's received, 558 were unique (the data contained several line items that were duplicates of the same PR document number). Of the 558 unique PRs, we identified 265 of those as commodities contracts and were therefore, not further categorized. 61 PRs had insufficient data entered in the "PR_Name" or "Line_Item_Description" columns to be classified as a commodity or service and were subsequently not further categorized. The remaining 232 documents were determined to be services contracts and were classified into the categories represented in the DOD-wide Acquisition of Services Taxonomy (2012). The breakdown of service contract categories can be seen in Table 4.

Table 4. Service Contract Request Categories

Service Taxonomy Classification	Number of Contracts
Research and Development	0
Electronic and Communications Services	60
Facilities Related Services	17
Knowledge Based Services	60
Equipment Related Services	8
Logistics Management Services	0
Medical Services	0
Transportation Services	0
Construction Services	19

As noted above, the majority of services the USMC contracts are for "Electronics and Communications Services" and "Knowledge Based Services," followed by

“Transportation,” and “Equipment Related Services.” No contracts were issued for “Research and Development,” “Logistics Management,” “Medical Services,” or “Transportation Services.”

Once the data above was classified, further analysis was conducted to determine if service contract type had an effect on PALT. Table 5 shows the relation between service contract type and the average number of days it was in the PR Builder routing before it was approved as well as the number of “iterations” it went through before reaching approval status. An “iteration” occurs whenever the PR is rejected during the routing process and is returned to the previous step in the workflow for revision. Additionally, the table also identifies the high and low outliers in both time taken and number of iterations the PR went through before reaching an approved status.

Table 5. Service Contract Request Time (Days)

Service Contract Type	Average Time (Days) (High/Low)	Average Iterations (High/Low)
Research and Development	N/A	N/A
Electronic and Communication Services	129.7 (825/0)	1.6 (9/1)
Facilities Related Services	69.7 (262/2)	1.6 (4/1)
Knowledge Based Services	68 (319/0)	1.5 (5/1)
Equipment Related Services	75.1 (371/0)	1(1/1)
Logistics Management Services	N/A	N/A
Medical Services	N/A	N/A
Transportation Services	N/A	N/A
Construction Services	87.3 (371/1)	2.2 (9/1)

The data in Table 5 somewhat sporadic and difficult to draw conclusions from. One assumption made before analyzing the data was that the more frequently a specific service type was submitted as a PR, the less iterations and shorter the wait time would be because there would be institutional knowledge and familiarity with the process amongst the Marines and civilians in the routing process. This was not the case. For example, “Electronic and Communication Services” and “Knowledge Based Services” are tied for most number of PRs in the data, however, “Electronic and Communication Services” on

average takes 129.7 days before it is approved with an average of 1.6 iterations while “Knowledge Based Services” took on average 68 days and 1.5 iterations before reaching an approved status. The most requested service contract types represent the longest and shortest wait times before approval based on the data we received.

Unfortunately, it was not possible to determine why this is based on the data received from Deloitte Consulting LLP. The reasons for the rejection and subsequent iterations was not given in the data thus leaving it only to speculation as to why the PR was rejected. Additionally, there was no data provided that would allow us to determine why a PR was left in routing and not approved or rejected leading to a longer wait time. Despite this, it is interesting to note that the average iterations a PR is subjected to is relatively equal across services contract types. The only firm outlier is “Construction Services” with an average of 2.2 iterations. This contrasts sharply with the variation in the average time between the service contract types. Further data would be needed to determine if contract type is related to longer or shorter PALT periods.

2. MANAGERIAL AND ANALYTICAL ACTIVITY OUTSOURCING

Another focus of this research project was to determine if the Marine Corps service contract requests for information technology (IT) services and knowledge based services was detrimental to the Marines ability to retain capacities for operational capabilities. There is a growing concern among scholars that the continued reliance on contractors to perform managerial and analytical functions is contributing to a “hollowing out” of government agencies that no longer have the internal competency to perform government functions without the assistance of contractors. Additionally, a follow on concern is that the reliance upon contractors to perform IT and knowledge based services may lead to an inability to properly manage contractors performing these services without any internal knowledge, competency, or expertise (Milward and Provan, 2000).

The results of our data analysis concluded that IT services and knowledge based services are the majority of the service requests active in PR Builder (Assad, 2012). Through our research and analysis of the PR Builder line items we’ve concluded that there is not a “hollowing out” of management or analytical ability on behalf of the Marine Corps

(Milward and Provan, 2000). Specifically, looking at the IT services for electronics and communications for requests below the SAT, the Marine Corps is using these services to provide operational units with commercial services. Contracting regulations and various government contracting authorities state that commercial services should not be provided by the government. It is in the best interest of the Marine Corps to contract commercial services that provide Marines and Sailors with the ability to utilize high speed internet, cable, virtual teleconference, and similar services that enhance the Marines' ability to communicate and conduct command and control (FAR Part 7.5).

The data used in this research project informed us of the type of knowledge based services that the Marines are requesting through the PR Builder system. With several exceptions that could not be investigated further due to a lack of data available, the contract requests for knowledge based services (below the SAT) are not eliminating the Marines' capacity or accountability functions as a service (Assad, 2012). A majority of the professional services being requested involve subject matter expertise that is not within the Marines' resident military occupational specialties (MOS). The professional services revealed in the data are for commercial services. These services are best left to be performed by private business (utilizing cost as a driving factor). The government does not benefit from competing with private industry for the procurement of these types of services (Cohen & Eimicke, 2008). As the USMC and U.S. Navy shift into the next era of coercion and deterrence from the sea, conducting large scale dispersed operations requires additional commercial support from contractors to fill in the gaps of combat support (Berger, 2020).

As a warfighting organization, the USMC places its ability to remain a lethal, agile force capable of conducting missions across the range of military operations (ROMO) as the highest priority (Berger, 2020). In order to conduct a broad spectrum of capabilities with limited personnel and organic equipment, the Marines must be reliant on contractor services to provide gaps in transportation needs, equipment related services, IT support, facilities maintenance, and other knowledge based services that allow the Marines to remain focused on their core competencies (Assad, 2012). All of these service contract request types were revealed through this project's analysis. These results provide a focus point and represent to decision makers that the investment in efficient commercial services

frees up the Marines and supporting establishments to focus on warfighting and crisis response efforts. With a continued investment in commercial services, evident by the high volume of requests for information based contracts, comes the need for subject matter experts and contracting specialists to be aware of the competencies required in order to properly solicit, manage, and close out contracts with private industry (Cohen & Eimicke, 2008).

One area of the research that could potentially be a flawed assumption involved the use of requests below the SAT. The analysis for this project made the assumption that service contract requests below the SAT could provide a data sample for what the rest of the USMC is requesting for service contracts. With a majority of the contracts for professional services below the SAT originating and involving the stakeholders at the unit level or major subordinate command (MSE) level, there could be a misleading trend for large service contracts above the SAT that are acquired and contracted for use by all USMC major commands. Due to the limited scope of the data used in this analysis, we cannot confirm that the policies and requests for varying commercial services reflect the policies of the Marine Corps as a whole. Additional research could investigate if the various DOD branches' expansive service contracts are potentially deteriorating the services capacities, competencies, and accountability (Cohen & Eimicke, 2008).

3. PERSONNEL SPECIALIZATION AND COMPETENCY

One of the objectives of this research study was to determine if individual personnel specialization was a factor in the efficiency and effectiveness of the purchase request process. The data provided by the PR Builder system and members of Deloitte Consulting, LLP did not provide any quantitative or qualitative material to determine the impact of this objective. The data files that were used in this study were stripped of DoDAAC identifiers and used as objective request information. In order to determine if personnel specialization, training, and other human factors are involved with the PR process, further research is required. Due to the quantitative nature of this project's analysis and research, personnel specialization and competency could not be determined. A qualitative study of training plans, personnel interviews, and review of historical transaction trends and request SOPs

would provide a more definitive answer. Refer to the following chapter for recommendations and additional details.

C. SUMMARY

This chapter provided the details for how the data was cleaned, filtered, and formatted to fit the needs of the project. Additionally, the chapter focused on the analysis of the data and what information it provided to the researchers. Classifying service contract requests into specific categories and addressing the timelines and iteration of the requests provided valuable insight into what the Marine Corps units are requesting from private industry below the SAT. Lastly, this chapter points out that there are opportunities for additional related research in order to determine where potential efficiencies can be gained. The following, final chapter of this project provides recommendations based on our analysis of the PR Builder data set.

V. CONCLUSIONS AND RECOMMENDATIONS

The purpose of this project was to increase the United States Marine Corps' institutional knowledge of factors that contribute to Purchase Request lead times for contracted services. Additionally, we attempted to classify and categorize the services the Marine Corps contracts into categories set forth by the DOD-Wide Acquisition of Service Taxonomy (Assad, 2012). The purpose of this categorization was done to determine if managerial and analytical services were being contracted out on a large enough scale to have negative effects on the Marine Corps' ability to handle these functions organically if need be. This project will be a contribution to the scant body of knowledge that specifically relates to Marine Corps service contracts. This chapter will discuss our findings and provide recommendations.

A. RESEARCH QUESTION CONCLUSIONS

1. Primary Question

What is the scope of service activities that have been procured by the USMC through the PR Builder system over the last four years? What categories of services have been under contract? How do these classifications align with PALT and the number of rejected iterations of purchase order requests? Are there rejections associated with overall PALT length?

The scope of Marine Corps Service contracts, at least from the FY16-19 data set received from Deloitte Consulting LLP, revealed that the Marine Corps has a relatively limited scope for service contracts under the SAT. Only 11.6% of the 2,000 documents received were for service contracts. Furthermore, the services that the Marine Corps does contract are even more limited. The FY16-19 PR Builder data revealed the scope of Marine Corps service contracts are predominantly spread across two of the nine categories of the DOD-wide Acquisition of Services Taxonomy – “Electronic and Communication Services” and “Knowledge Based Services.” The Marine Corps contracts for “Construction Services,” “Facilities Related Services,” and “Equipment Related Service” to a much lesser extent and the data showed no contracts for the remainder of the services listed in the taxonomy (The exact data can be seen above in Table 8).

It is hard to determine conclusively if the number of iterations and service type contribute to PALT lengths. The data set did not reveal a clear correlation between the average number of iterations and the amount of days a PR waited before reaching an approved status (see Table 9). For example, “Electronic and Communications Services” and “Facilities related Services” both took, on average, 1.6 iterations to reach approval, but took an average of 129.7 and 69.7 days, respectively, to reach an approved status. As mentioned previously, if this study were to be duplicated and updated, it would be critical to obtain information as to why the PR was rejected leading to more iterations. This was a critical weakness in assessing PALT as it relates to services. Without this data it was not possible to ascertain why the PR was rejected causing increased PALT lengths.

2. Secondary Questions

- (1) What managerial and analytic activities are outsourced through PR Builder? Do USMC service contracts contribute to a “hollowing out” and loss of internal management capacity, or are outsourced managerial and analytic activities an efficient way to procure managerial capacity (Milward and Provan, 2000)?

The PR Builder data showed most requests for services below the SAT are for “knowledge based” services and IT support to assist with communication systems (The exact data can be seen above in Table 8). Although the units are requesting for other services like transportation, equipment maintenance and support, and installation services, the focus of the results represents that the majority of unit and installation needs are for services that provide commercial services that should not be the focus of Active Duty Marines (Assad, 2012). In order to maintain a government organization’s accountability for mission critical skills and retain capacity to perform MOS skills, contracting specialists need to carefully filter requests to prevent any unnecessary contracts for services that should remain an organic capability, performed in house (Cohen & Eimicke, 2008).

Our data shows that despite several outliers for “knowledge based” services and equipment support, there is not a “hollowing out” of the Marine Corps’ managerial capability (Assad, 2012). The activities that are being requested (below the SAT) increase the efficiency of the unit and installations requesting them. The outliers in the data reflected

support for U.S. Navy equipment and areas of expertise. These contract requests may be required due to a deficiency of qualified personnel or requirement to maintain permanent or semi-permanent personnel for a position that cannot risk the high turnover rate of Active Duty and Reserve uniformed personnel (Milward and Provan, 2000).

An important assumption for this question remains that the request data used for our study was at or below the SAT. If data could be retrieved for large scale “knowledge based” and communication system service contracts, the conclusion could concur or contradict this study. Additionally, as the Marine Corps acquires complex technology packages and weapon systems that require additional contractor management, manufacturer support, and IT updates etc., more research should be invested into a loss of the Marines ability to conduct managerial and analytical functions for critical capabilities (Assad, 2012).

- (2) How is individual personnel specialization used to route purchase orders, and how does this impact the efficiency and effectiveness of purchase request processing?

Our data sample and methodology could not answer this secondary question with any certainty. Due to limited ability to acquire an accurate data sample for PR Builder service requests, this question’s required information couldn’t be achieved. Throughout the research process many assessments were made to reasons for multiple iterations for somewhat generic requests and lengthy PRALT timelines. This hypothesis could not be validated with the provided data. The conclusion of this research project is that additional knowledge can be gained from a follow-on study that assesses qualitative information. In order to best achieve the answer to this question, researchers should conduct an analysis of contract requesting supply chain personnel training and education methods, interviews with data entry personnel and regional contracting specialists, as well as more in depth analysis of the reasons for rejected contracting requests within PR Builder to assess if human factors and lack of training are contributing to inefficiencies in the request process.

B. RECOMMENDATIONS

- (1) Institute training at all levels of Supply School to teach the core competencies required for PR creation and entry into PR Builder. Subsequently, conduct further research to analyze the efficacy of the training instituted to ensure Marines are positioned for success in their future billets.

McComas et al. (2007) outlined above that 68% of Marines stated that using PR Builder was the most challenging part of the procurement process. Although it cannot be conclusively determined from our data set, an obvious correlation is that inefficiency and difficulty of the end user using the PR Builder system is a key factor in determining PALT. Incorrect entries or errors within the PR itself lead to rejected requests and subsequent iterations that increase PALT. The human error issue is further compounded by the migratory nature of personnel within the Marine Corps and military. If a Marine is at a unit that extensively uses PR Builder, they will eventually become more proficient within the system through repetition. However, their spot will eventually be vacated and filled by another Marine who will presumably make the same mistakes.

The enlisted Marines charged with handling PR creation and submission into PR Builder are MOS code 3043-Supply Chain and Material Management Specialist. As of 2019, their entry level schoolhouse aboard Camp Johnson, North Carolina did not include training in the areas acquisition regulation, commercial procurement, or services contracting to include PR Builder (Kantner & Letterle, 2019). From personal experience the lack of specific PR Builder training is mirrored in the entry level officer schoolhouse as of 2016. However, the schoolhouse trend is shifting. As of 2020, the period of instruction for Supply Chain Management Officer Course (SCMOC) now includes 6 total hours of instruction dedicated to PR creation and entry (United States Marine Corps, 2020).

Despite this positive trend on the officer level, it is not being reflected in the enlisted training at any level. A strong recommendation is to have PR specific training for enlisted Supply Marines at not only the basic course, but in subsequent courses such as Supply Chain Management Intermediate Course (SCMIC) (for noncommissioned officers) and Supply Chain Management Chiefs Course (SCMCC) (for Supply Chiefs). Additionally, the Marines in the schoolhouse would benefit heavily from an offline version of the PR

Builder system that would allow them to train within the system and create fake PRs for entry.

Furthermore, the additional training would allow for the easier codification of data for further analytics of PRs. In the data we received from Deloitte Consulting LLP, a significant amount of the PRs were erroneously, and seemingly arbitrarily coded as “commodities” or “services.” This is indicative of a lack of understanding and training of what either category is and can skew effective auditability and future research. The arbitrary classifications of service or commodity required a line-for-line review of each PR in the data set to determine the actual classification. Additionally, specific training should be given for inputting information into the “Line_Item_Description” section. Many entries in this section lacked specificity, and useful information to allow for others to determine what is being contracted. This is another potential cause for rejection and subsequent increased iterations and longer PALT lengths. Increased training and competency within the PR Builder system will allow for a more streamlined process with less user error contributing to PALT. It will also allow for easier auditability and accounting of taxpayer dollars as well as decreased PALT times.

- (2) Sustain responsible contract requesting for services below the SAT. Ensure the Marine Corps balances the ease of contracting out service needs with the necessity to retain managerial functions with uniformed personnel.

The first recommendation for this research project is to sustain the responsible request policies for commercial services, below the SAT. The data sample used for this research project showcased that the requests made through PR Builder enhance the Marines ability to access and maintain communications systems as well outsource consulting and “knowledge based” services that are not resident within MOS responsibilities. (Assad, 2012) The contracts for services sourced through PR Builder are areas of expertise outside the government’s core competencies. The data provided clear examples of proper outsourced contracts that do not limit the capacity or accountability of government agencies (Cohen & Eimicke, 2008).

The requests utilized in our research provide a strong argument that government contracting is improving its ability to manage acquisition of services. Utilizing private

contractors for “knowledge based” and IT services provides benefits with the assumption that they are being supervised and managed by a competent contracting workforce of the appropriate size (Assad, 2012). One of the main objectives for stakeholders should continue to be refining and developing specific, measurable requirements to facilitate service contract requests. In addition to request originators and regional contracting specialist personnel carrying out their duties competently and responsibly, another recommendation to bolster responsible management of requests is for the Marine Corps to develop an enterprise sourcing approach that can be rapidly implemented by units and regional contracting offices. This strategic approach for general commercial services in high demand from many USMC units could increase the contracting workforce ability to manage contracts with a procedural approach. Effective communication networks, reporting requirements, contract formatting with clear and concise language, and standardized measurable performance metrics would allow the Marines to spread critical contract knowledge to requesting units and contract officer representatives (COR) (Cohen & Eimicke, 2008).

Maintaining managerial and analytical capabilities in house should remain important to all units and levels of command. Contractors must be held to the terms and conditions and remain removed from agency policy decisions. The Corps should avoid handing over mission capability capacity to contractors or risk the Marines losing their ability to maintain momentum and operational tempo in combat and contingency environments. Educating current and future Marines is critically important to sustaining the responsible trend for accountable contract requests and developing a workforce that can manage the growing reliance on contractors for Marine Corps requirements (Cohen & Eimicke, 2008).

C. SUMMARY

This chapter reviewed the objectives of our analyses and how it contributed to the existing body of knowledge specific to Marine Corps service contracts. In addition, we investigated the competency of the Marines creating PRs and entering them into the PR Builder system. The questions answered in this chapter related to the findings located in

Chapter IV, which clarified our data and material examined in relation to their effects on PALT. Furthermore, we provided two recommendations at the end of the chapter to reduce PALT and increase the overall competency of Marine Corps contracting and Supply personnel.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- Assad, S. D. (2012, August 27). Taxonomy for the acquisition of services and supplies & equipment [Memorandum]. Department of the Navy.
<https://www.acq.osd.mil/dpap/policy/policyvault/USA004219-12-DPAP.pdf>
- Berger, D. (2020). Force Design 2030. United States Marine Corps.
<https://www.hqmc.marines.mil/Portals/142/Docs/CMC38%20Force%20Design%202030%20Report%20Phase%20I%20and%20II.pdf?ver=2020-03-26-121328-460>
- Berteau, D. (2018, March 30). DOD can reduce time to contract. *Federal Times*.
<https://www.federaltimes.com/acquisition/2018/03/23/dod-can-reduce-time-to-contract/>
- Brien, S. T., & Hine, L. L. (2015). Complex products and comprehensive service agreements: A case study of outsourcing in contract cities. *Journal of Public Procurement*, 15(2), 150–176
- Brien, S. T., Letterle, K. W., & Kantner, P. A. (2020). *Measuring the effects of federal budget dysfunction: Impacts of continuing resolutions on public procurement* [Paper presentation]. APPAM 202 Fall Research Conference, November 2020, Washington, DC, United States. <https://doi.org/10.13140/RG.2.2.25404.46722>
- Brown, T. L., Potoski, M., & Van Slyke, D. M. (2010). Contracting for complex products. *Journal of Public Administration Research and Theory*, 20(Supplement 1), i41–i58. <https://doi.org/10.1093/jopart/mup034>
- Cohen, Steven, & Eimicke, William. (2008). *The Responsible Contract Manager: Protecting the Public Interest in an Outsourced World*. Georgetown University Press, Washington, D.C.
- Definitions of words and terms, F.A.R. 2.1 (2019). Retrieved from
<http://farsite.hill.af.mil/reghtml/regs/far2afmcfars/fardfars/far/02.htm>
- Heinrich, Carolyn, J., Lynn Jr, Laurence, E., Milward, Brinton, H. (2013). A state of agents? Sharpening the debate and evidence over the extant and impact of the transformation of governance. *Journal of Public Administration Research and Theory*, 20, 13–119.
- Kantner, P., & Letterle, K. (2019). *An analysis of contracting activity purchase request acceptance lead time for USMC using unit acquisitions under the simplified acquisition threshold* [Master's thesis, Naval Postgraduate School]. NPS Archive: Calhoun. <https://hdl.handle.net/145/10505>

- Marine Corps Installations National Capital Region - Regional Contracting Office (MCINCR-RCO). (2020). from <https://www.quantico.marines.mil/Offices-Staff/Regional-Contracting-Office/PR-Builder/>
- McComas, M. T., Oliver, D. W., Harrington, R. J. (2007). *Analyses of the United States Marine Corps continuous process improvement program applied to the contracting process at Marine Corps Regional Contracting Office-Southwest* [Master's thesis, Naval Postgraduate School]. NPS Archive: Calhoun. <https://calhoun.nps.edu/handle/10945/10214>
- Milward, H. B., & Provan, K. G. (2000). Governing the hollow state. *Journal of Public Administration Research and Theory*, 10, 359–379.
- Pegnato, J. (2003). Assessing federal procurement reform: Has the procurement pendulum stopped swinging? *Journal of Public Procurement*, 3(2), 145–175. <https://doi.org/10.1108/JOPP-03-02-2003-B001>
- Policy, F.A.R. Subpart 7.5 Inherently Governmental Functions. (2019) Retrieved from. https://www.acquisition.gov/far/part-7#FAR_Subpart_7_5
- Roman, A. V. (2015). Public procurement specialists: They are not who we thought they were. *Journal of Public Procurement*, 15(1), 38–65. <http://dx.doi.org/10.1108/JOPP-15-01-2015-B002>
- Schapper, P., Veiga Malta, J., & Gilbert, D. (2006). An analytical framework for the management and reform of public procurement. *Journal of Public Procurement*, 6(1/2), 1–26. <https://doi.org/10.1108/jopp-06-01-02-2006-b001>
- Schwartz, M., Sargent, J. F., & Mann, C. T. (2018). *Defense acquisitions: How and where DOD spends its contracting dollars* (CRS Report No. R44010). Congressional Research Service. <https://fas.org/sgp/crs/natsec/R44010.pdf>
- Selden, S., Brewer, G., & Brudney, J. (1999). Reconciling competing values in public administration: Understanding the administrative role concept. *Administration & Society*, 31(2), 171–204. <https://doi.org/10.1177/00953999922019085>
- United States Marine Corps. (2020, November 04). *Supply chain management officer course hours by lesson*.

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California