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Implementing Category Management within the U.S. Marine Corps Logistics Command

December 2022

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Prepared for the Naval Postgraduate School, Monterey, CA 93943

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ABSTRACT

The purpose of this research is to conduct a spend analysis on the Marine Corps Logistics Command's (MARCORLOGCOM) contracting spend data from Fiscal Year (FY) 2007 to FY 2022 to determine if category management (CM) can be implemented to improve the command's contracting procedures. CM is the purchasing strategy that the Department of Defense (DoD) has chosen to implement within its contracting organizations to increase the efficiency and to reduce costs associated with government purchasing. Although the Office of Management and Budget (OMB) directed the implementation of CM in 2014, it has yet to be fully integrated within all DoD contracting strategies. Our research analyzed MARCORLOGCOM's spend to identify trends with regard to product service codes (PSC), contract types, and contractors. Based on the implications of our research, we determined that although it appears MARCORLOGCOM has attempted to implement CM, there are opportunities for the command to expand its use of the strategy. We concluded our research with three recommendations for implementing CM within MARCORLOGCOM which included using multiple award indefinite delivery contracts (IDCs) rather than single award IDCs; expanding the use of IDCs; and increasing coordination, communication and organization among the command contracting units.



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LIST OF ACRONYMS AND ABBREVIATIONS

BIC	best in class
BICmd	Blount Island Command
BOA	Basic Ordering Agreements
BPA	Blanket Purchase Agreements
СМ	category management
CRS	Congressional Research Service
CSV	Comma Separated Values
DCA	Definitive Contract Action
DMC	Distribution Management Center
DO	Delivery Orders
DoD	Department of Defense
DoDAAC	Department of Defense Activity Address Code
FAR	Federal Acquisition Regulation
FPDS-NG	Federal Procurement Data System—Next Generation
FY	fiscal year
GAO	Government Accountability Office
GSA	General Services Administration
GWCM	Government-Wide Category Management
IDC	Indefinite Delivery Contracts
ID/IQ	Indefinite Delivery/Indefinite Quantity
IDV	Indefinite Delivery Vehicles
LSMC	Logistics Services Management Center
MAC	multiple award contract



MARCORLOOCOM	Marine Corps Logistics Command
MATCOM	Marine Corps Materiel Command
MCLB	Marine Corps Logistics Base
MDMC	Marine Depot Maintenance Command
MEF	Marine Expeditionary Forces
MMC	Maintenance Management Center
NAICS	North American Industry Classification System
NPS	Naval Postgraduate School
OMB	Office of Management and Budget
PIID	procurement instrument identifier
РО	Purchase Orders
РОС	point of contract
PSC	Product or Service Code
RDT	resource dependence theory
SAP	simplified acquisition procedures
SSLC	Strategic Sourcing Leadership Council
SUM	spend under management
UEID	Unique Entity Identification
WSMC	Weapon System Management Center





I. INTRODUCTION

The purpose of this chapter is to provide background information on contracting and the implementation of category management (CM) within the Department of Defense (DoD). To begin, we will provide relevant background information on the subject matter of our research. Next, we will discuss the purpose of our research, our research questions, and the methodology that we will use to answer our research questions. Finally, in this chapter we will discuss the benefits and limitations of our research and the organization of our paper. We will conclude this chapter with a short summary of the chapter.

A. BACKGROUND

From Fiscal Year (FY) 2018 to FY 2021 the DoD has annually spent \$373.5 billion, \$404.5 billion, \$448.7 billion and \$408.2 billion, respectively, on the procurement of goods and services in support of the warfighter (Bloomberg Government, n.d.). These contracts, however, may or may not utilize the most appropriate contracting methods to procure the required goods and services. DoD contract management falls seventh on the Government Accountability Office's (GAO) top 10 listing of high-risk items for 2021(Sager, 2021b). Specifically, the GAO called the DoD to issue new guidance detailing how the department "intends to use category management to help better manage service acquisitions…and [to] demonstrate service acquisition and category management leaders have the capacity to effectively implement this guidance" (Sager, 2021b, p. 239).

DoD contract management continues to present a challenge for agencies based on supporting data that suggests contracts for supplies and services are not efficiently procured (Sager, 2021b). One strategy that may be applied to improve the efficiency of procurement is CM. Defined by the Office of Management and Budget (OMB), CM "refers to the business practice of buying common goods and services as an enterprise to eliminate redundancies, increase efficiency, and deliver more value and savings from the Government's acquisition programs" (Weichert, 2019, p. 1). In 2019, the OMB issued a groundbreaking circular memorandum, OMB Circular M-19-13, requiring government agencies to use CM to the maximum extent practicable (Weichert, 2019). The OMB further stated, "the lack of mechanisms to support agency collaboration on common



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL contract solutions has resulted in billions of dollars in lost cost avoidance, inappropriate contract duplication, and missed opportunities to adopt Government and industry best practices" (Weichert, 2019, p. 2).

The problem that prompted this research is that CM has not been well established in contracting strategies across all agencies and services within the DoD (Sager, 2021b). OMB guidance clearly asserts CM as the preferred solution to increasing the efficiency of government contracting processes. An assessment of CM requires the analysis of spend data to determine opportunities for more effective contracting actions within an organization. Research findings from conducting a spend analysis on the Marine Corps Logistics Command (MARCORLOGCOM) will aid the command's ability to measure the efficiency of its contracting procedures with regards to CM.

B. PURPOSE OF RESEARCH

The purpose of this research is to conduct a spend analysis on MARCORLOGCOM's contracting history to determine the spend characteristics of the command. We will use the results of our research to provide MARCORLOGCOM with an assessment of its contracting history and to provide recommendations for how the command can implement CM to improve its contracting strategy.

C. RESEARCH QUESTIONS

Our research will answer the following questions:

- 1. What are MARCORLOGCOM's major areas of spend?
- 2. How can category management be implemented, or further implemented, within MARCORLOGCOM to improve the spend efficiency of the command's contracting processes?

D. METHODOLOGY

For our research, we will obtain quantitative data of MARCORLOGCOM's contracting history. We will gather the relevant data required for this research from two sources. We will obtain an internal copy of MARCORLOGCOM's contracting history from a representative at the command and we will download a publicly available record



of MARCORLOGCOM's contracting history from the Federal Procurement Data System- Next Generation (FPDS-NG) website.

To conduct our research, we will analyze all the contract actions from the maximum number of FYs that we are able to obtain to determine MARCORLOGCOM's major spend categories, most utilized contract types, largest dollar contracts and most awarded contractors. We will identify the major spend categories by Product or Service Codes (PSC) and we will identify the contractors by either its business name or Unique Entity Identification (UEID).

We will provide MARCORLOGCOM with the findings from our research and recommendations for how it can improve its contracting strategy. We will provide a more robust explanation of our methodology in Chapter IV of this report.

E. BENEFITS OF RESEARCH

The contribution of this study is significant from both a warfighting and moneysaving perspective. With our recommendations, MARCORLOGCOM may be able to further implement CM within its command to purchase higher quality goods and services more efficiently and at a lower cost to the taxpayer. With increased implementation of CM, MARCORLOGCOM's administrative burdens will be reduced, and the warfighter will have more time to focus on their mission.

Furthermore, our research will assess whether MARCORLOGCOM manages its contracts in compliance with the required guidelines set forth by the OMB. The goal of government contracting is to equip the warfighter while maintaining the integrity of the taxpayer's dollars. CM accomplishes this goal and, therefore, represents an asset to DoD contracting.

Additionally, through this research, we will be able to better assess the extent to which strategic sourcing is implemented within MARCORLOGCOM. Strategic sourcing and CM contracting strategies represent immense cost savings for the DoD. Within the federal government, it is important for commands to remain agile and efficient in its ability to project the might of the U.S. military anywhere and anytime. As a result, it is important to ensure that strategic sourcing strategies are utilized within the DoD to the



widest extent practicable. Adhering to these strategies will help to maintain the increasing lethality of the warfighter for years to come.

F. LIMITATIONS OF RESEARCH

The scope of our research will be limited in three ways. The first limitation of our research is that it will focus exclusively on the Marine Corps. Our research will not contain any information or analysis on the spend characteristics or CM practices within any other government department or agency. The next limitation is that our research will focus exclusively on the logistics command within the Marine Corps. Our research will not contain any information or analysis on any other command within the Marine Corps. The final scope limitation of our research is that we will only analyze MARCORLOGCOM's contracting history from FY 2007 to FY 2022. MARCORLOGCOM awarded contracts before FY 2007, but none of that contracting history will be included in our research, which will limit the scope of our results. In addition to the limitations on the scope of our research, there may be additional limitations on the quality of our results.

Determining the extent to which CM is implemented within MARCORLOGCOM involves analyzing contracts from reported contracting data. Specifically in 2020, the GAO explored limitations on federal spend power and limitations on the advancement of CM initiatives. In its report, the GAO suggested, "Poor data hinders agencies' efforts to implement category management and realize the initiatives benefits" (DiNapoli, 2020, p. 36). Akin to the GAO's findings, research from Landale et al. (2018) detailed obtaining access to complete and consistent spend data as a research limitation to their findings. For this research, the quality of our findings will be limited by the accuracy of data that is reported by MARCORLOGCOM and FPDS-NG.

G. ORGANIZATION OF RESEARCH

The organization of this paper is as follows:

Chapter I will introduce relevant background information regarding the subject matter of our research. We will present the purpose of our research and our research questions. We will then detail our methodology, discuss the benefits and limitations of



our research, and discuss the organization of our research. Chapter I will conclude with a summary of the chapter content.

Chapter II of this report is a literature review. Chapter II will discuss relevant background literature on the Resource Dependance Theory (RDT), portfolio management, CM, and spend analysis. Chapter II will conclude with a summary of the chapter content.

Chapter III will highlight relevant background information on MARCORLOGCOM and will annotate the breakdown of its command operations, organization command history, and current operations. Additional information from the chapter will identify personnel specifics of the command. Chapter III will conclude with a summary of the chapter content.

Chapter IV will detail the methodology that we will use in our research. We will discuss what our data sources will be, how we will access the data, and how we will analyze the data for our research. Chapter IV will conclude with a summary of the chapter content.

Chapter V will detail the findings of our research. We will provide the findings concerning MARCORLOGCOM's general spend characteristics, spend by PSC, and spend by contractor. We will then list the top 10 most utilized PSCs. Next, we will detail the findings of the spend analysis with regards to contract type. We will then select the most utilized PSC by MARCORLOGCOM and provide the results of a spend analysis that we will conduct within that PSC specifically. Finally, we will discuss the implications of our research and provide our recommendations to MARCORLOGCOM. Chapter V will conclude with a summary of the chapter content

Chapter VI will summarize our research, provide our conclusions, and discuss areas for further research.

H. SUMMARY

The purpose of this chapter was to provide background information on contracting and the implementation of CM within the DoD. To begin, we provided relevant background information on the subject matter of our research. Next, we



discussed the purpose of our research, our research questions and the methodology that we will use to answer our research questions. Finally, in this chapter we discussed the benefits and limitations of our research and the organization of our research.

Chapter II will present a literature review on the RDT, portfolio management, CM and spend analysis.



II. LITERATURE REVIEW

The purpose of this chapter is to present a literature review on resource dependence theory (RDT), portfolio management, category management (CM) and spend analysis. We will detail the background of RDT and why it is a foundational theory to analyze contractual relationships. We will discuss the Kraljic portfolio management model and how it can be used to apply RDT to an organization's procurement strategy (Kraljic, 1983). We will discuss the literature pertaining to CM, how it is utilized within the Department of Defense (DoD) and the CM best practices. Finally, we will discuss spend analysis, how it is used to inform CM, and its limitations. Chapter II will conclude with a summary of the chapter content.

A. **RESOURCE DEPENDENCE THEORY**

A contract establishes a relationship between two parties. Depending on the distribution of power between the parties, one party may be more dependent on the other resulting in an imbalance of power between the parties. Based on the dependency characteristics between the buyer and seller present in DoD contracting, our research relies on the RDT as the foundational theory to analyze contractual relationships within the DoD.

RDT was established by Jeffrey Pfeffer and Gerald Salancik in 1978 with their publication of *The External Control of Organizations: A Resource Dependence Perspective* (Pfeffer & Salancik, 1978). Since then, "[RDT] has become one of the most influential theories in organizational theory and strategic management" (Hillman et al., 2009, p. 1404). RDT "recognizes the influence of external factors on organizational behavior" and acknowledges that "organizations attempt to reduce others' power over them, often attempting to increase their own power over others" (Hillman et al., 2009, p. 1404) This theory acknowledges the idea that although organizations may be independent, they "are not autonomous, but rather are constrained by a network of interdependencies with other organizations" (Pfeffer & Salancik, 1978, p. 26). This theory is interesting as it highlights the idea that although companies may be



In their research, Pfeffer and Salancik (1978) recommended interorganizational arrangements that firms can make for the purpose of "reducing power imbalances and for managing mutual dependencies between the focal organization and those parties in its environment on whom it depends for critical resources" (Drees & Heugens, 2013, p. 1669). These actions include: mergers, joint ventures, boards of directors, political action, and executive succession (Pfeffer & Salancik, 1978). The type of arrangement that is most appropriate to reduce external dependence is based on what the organization's critical resource(s) are, and how uncertain those resources are. Pfeffer and Salancik (1978) state, "Criticality measures the ability of the organization to continue functioning in the absence of the resource" (p. 46). In a review of RDT, Werner Nienhuser (2008) furthers this definition by explaining that "a particular resource may only constitute a very small part of total resource needs or costs, but it is critical if the missing of that resource endangers the ability of the organization to function" (p. 12). Uncertainty, in the context of this theory, deals with how resources are distributed within the environment. If the resource is scarce, it is considered to be more uncertain, and the transactions that occur for that resource tend to be more complex. If it is deemed critical from an organizational perspective, the company is more dependent on other organizations for it (Nienhuser, 2008). Pfeffer and Salancik (1978) summarized by stating, "Organizations that require scarcer resources, for which acquisition is more uncertain, would be less likely to survive than those that require resources in more stable and ample supply" (p. 47), indicating the need for some type of interorganizational arrangement.

According to RDT, when an organization is dependent on other organizations for scarce or uncertain resources, it must work to reduce this uncertainty and dependency. Nienhuser (2008) summarized this aspect of RDT by stating, "when there is uncertainty and dependence on critical resources the organization is forced to take measures to reduce uncertainty" (p. 12). After determining which resources are critical, managers must then undergo the challenging effort of determining the extent of the environmental factors such as scarcity and resource concentration that surround these resources. Given this challenge, Pfeffer and Salancik (1978) noted, "Since there is no way of knowing about the environment except by interpreting ambiguous events, it is important to



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL understand how organizations come to construct perceptions of reality" (p. 13). Pfeffer and Salancik (1978) went on to discuss how companies can view its environments in order to decide which of the five interorganizational arrangements a company might take to reduce its dependence and maintain its power over other organizations.

Since the establishment of the RDT, it has been used by businesses, cited in literature and studied for relevancy. In 2013, Drees and Heugens conducted a metaanalysis of 157 tests of the RDT created by Pfeffer and Salancik (1978). They concluded that "their basic model remains intact...specifically, resource dependencies lead to the formation of interorganizational arrangements" (Drees & Heugens, 2013, p. 1687). Furthermore, Drees and Heugens (2013) confirmed that interorganizational arrangements "strengthen focal organizational autonomy and legitimacy" (p. 1687).

RDT can be applied to an organization's procurement strategy. One way to do this is to utilize a procurement portfolio management model such as the model created by Peter Kraljic (Kraljic, 1983). We will discuss this model in the next section.

B. PORTFOLIO MANAGEMENT

Following the original publication of RDT in 1978, Peter Kraljic published an article in the *Harvard Business Review* offering guidance on how managers can improve their supply chain management processes by classifying the criticality and supply risk of the resources they require (Kraljic, 1983). Kraljic stated that his concept of supply management is relevant "whenever a manufacturer must procure a volume of critical items competitively under complex conditions" (1983, p. 110). Kraljic maintained the same definition for criticality as Pfeffer and Salancik (1978) and further defined risk and complexity as the level of "supply scarcity, pace of technology and/or materials substitution, entry barriers, logistics cost or complexity, and monopoly or oligopoly conditions" (Kraljic, 1983, p. 110). Kraljic (1983) maintained that the criticality, complexity, and risk associated with a resource are the most important variables to consider with supply management.

With criticality, complexity, and risk in mind, Kraljic made his most prominent contribution with the introduction of his portfolio management model (Kraljic, 1983).



Kraljic recommended that all of the resources that a company purchases be classified into four separate portfolios based on their combination of criticality and risk (Kraljic, 1983). The portfolios range from most critical and most risky to least critical and least risky (Kraljic, 1983). Kraljic (1983) arranged the portfolios in a graphical matrix in his publication. The portfolios are as follows: "strategic [high profit impact, high supply risk], bottleneck [low profit impact, high supply risk], leverage [high profit impact, low supply risk], and noncritical [low profit impact, low supply risk]" (Kraljic, 1983, p. 112). Kraljic's portfolio management model matrix from his original publication on the subject in 1983 is displayed in Figure 1.





Figure 1. Peter Kraljic's Portfolio Management Model Matrix. Source: Kraljic (1983, p. 111).

In total, the Kraljic portfolio management framework contains four steps: (1) "classification," (2) "Market Research," (3) "Strategic Positioning," and (4) "Action Plans" (Kraljic, 1983, pp. 112–115). Through the use of his method, Kraljic (1983) believed that organizations would be able to create "systematically documented strategies



for critical purchasing materials that specify the timing of and criteria for future action" (p. 115).

The framework that was originally created by Kraljic has been widely accepted and is now considered the standard for portfolio management and has been used "in many different industries like automobile, manufacturing, construction, oil and gas, etc., as an efficient tool for developing differentiated purchasing strategies" (Gangurde & Chavan, 2016, p. 1751). Furthermore, Gangurde and Chavan (2016) concluded that the "use of Kraljic's Portfolio Model (KPM) approach diminishes reliance of decision makers and makes decisions more balanced" (p. 1778).

Once an organization arranges its required resources within the Kraljic portfolio management model, it must then use one of many strategies to procure those resources. One of those strategies is CM.

C. CATEGORY MANAGEMENT

Private companies widely employ Kraljic's portfolio management model to organize its purchasing strategies. Ellram et al. (2007) indicated that since "not all purchases are of equal importance... not all receive equal attention and management" (p. 57). Just like Pfeffer and Salancik (1978) and Kraljic (1983) recommended, when a purchase deals with more critical and risky items, an organization needs to implement a more robust procurement strategy to acquire that item or service. One strategy that firms employ to differentiate between the strategic importance of different items is CM. Apte et al. (2019) indicated that "category management is the latest management philosophy and practice to link the purchasing function to strategic organizational goals" (p. 169) and is defined as

the practice of segmenting the main areas of organizational spend on bought-in goods and services into discrete groups of products and services according to the function of those goods or services and, most importantly, to mirror how individual marketplaces are organized. Using this category segmentation, organizations work cross-functionally on individual categories, examining the entire category spend, how the organization uses the products or services within the category, the marketplace and individual suppliers (O'Brien, 2015, p. 6).



The CM process is comprised of many different business activities including spend analysis, market analysis, costs calculations, and supplier analysis, among others (Apte et al., 2019). The goals of CM are "price reduction, process efficiency and/or demand management," and "the savings achieved... can be substantial, averaging 10–20 per cent savings per category of spend" (Apte et al., 2019, p. 170).

In 2007, Agndal et al. set out to discover trends in the sourcing of services specifically. They identified two trends indicating that industry was moving towards utilizing more CM principles (Agndal et al., 2007). First, they found that companies were moving from decentralized sourcing to center-led sourcing (Agndal et al., 2007). According to their study, center-led sourcing is when "agreements are made by the sourcing department," and the end users "are commonly in charge of actually submitting suborders" (Agndal et al., 2007, pp. 197–198). Agndal et al. (2007) indicated that the sourcing department makes these agreements with the supplier for a given service category, and then the end user can purchase the specific service they require. A second trend that Agndal et al. (2007) identified was that firms used to have a standard acquisition strategy for all the services they purchased, either relational or transactional. But the authors concluded in their findings that "firms were well underway towards implementing systems of more clearly categorizing services, e.g., according to the Kraljic matrix" (Agndal et al., 2007, p. 199). Once categorized, the firms would tailor its acquisition strategy to match the criticality of the service (Agndal et al., 2007).

Although each company may employ different tactics within the CM model, the end goal is generally the same: to reduce costs and improve efficiency. When implemented, the Government Accountability Office (GAO) found that it works (Young, 2013). When reviewing commercial purchasing practices in 2013, the GAO confirmed that companies that use CM have achieved cost savings between 10% to 20% (Young, 2013). Although the literature is overwhelmingly in support of CM from the macro perspective, minimal research exists assessing the impact of CM at the command or organizational level. Notable research from Clark and Arruda (2017) provided an analysis of the extent to which CM has been successful when contracting for services. However, their findings are limited in their ability to provide information on the command level and instead consolidate their findings solely on the macro-level (Clark & Arruda, 2017).



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL Nothing in this literature review disputes the merits of CM, and the conclusive findings are overwhelmingly in support. The government has taken a structured approach to CM in order to maximize the benefits of this contracting strategy.

1. Category Management in the Government

CM is the most recent evolution of many purchasing models and frameworks that the government has implemented in the past (Rung, 2014). The government has experimented with various enterprise purchasing strategies since the early 2000s, and those strategies evolved from strategic purchasing to strategic sourcing to CM. Strategic sourcing, which was the previous model, was defined in a 2005 OMB memorandum as "the collaborative and structured process of critically analyzing an organization's spending and using this information to make business decisions about acquiring commodities and services more effectively" (Johnson, 2005, p. 1). CM is not completely different from the previous model but "adds an additional layer of analysis to the concepts included in strategic sourcing" (Apte et al., 2019, p. 170). These frameworks evolved primarily through OMB publications. Through the publication of a memorandum in 2005, the OMB mandated all federal agencies to implement strategic sourcing practices (Johnson, 2005). In 2012, the Strategic Sourcing Leadership Council (SSLC) was established, and the OMB continued its dedication to strategic sourcing and supplied additional guidance (Zients, 2012). Finally, in 2014, the OMB stated that CM would replace strategic sourcing as the government acquisition model to purchase common goods and services (Rung, 2014). The OMB clarified that "this approach includes strategic sourcing, but also a broader set of strategies to drive performance" (Rung, 2014, p. 2).

To support the policy it created on CM in 2014, the OMB released the *Government-Wide Category Management Guidance Document* "to provide guidance for the governance, management and operations of category management" (Office of Management and Budget [OMB], 2015, p. 5) with the goal that the "Federal Government will buy as one" (OMB, 2015, p. 10). In order to ease the implementation of CM, the OMB guidance document established roles and detailed how CM shall operate. Figure 2 is the graphic provided in the OMB document to illustrate the CM operating model.



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL



Figure 2. Government-Wide Category Management Operating Model. Source: OMB (2015, p. 20).

In addition to creating the model, this document also established the categories and introduced the idea of level 1 and 2 categories (OMB, 2015). A level 1 category is a large, all-encompassing industry category, such as information technology (IT), and a level 2 category is a sub-category within the larger level 1 category such as IT software (OMB, 2015).

In 2019, the OMB deputy director for management, Margaret Weichert, published a memorandum to provide added guidance on CM. This memorandum offers five actions that "agencies shall undertake...to better position themselves to bring spending under management and leverage common contract solutions and practices" (Weichert, 2019, p. 3). The document also provided key steps that agencies can take to accomplish the five actions. The GAO (DiNapoli, 2020) summarized these five actions and the key steps to accomplish these actions in a graphic which is included in this report as Figure 3.





Figure 3. GAO Summary of OMB's Five Key Category Management Actions. Source: DiNapoli (2020, p. 14).

In 2021, the OMB revised its 2019 memorandum on CM (Miller, 2021). The purpose of the revisions was "to achieve a stronger and clearer alignment between category management stewardship principles and small business contracting" (Miller, 2021, p. 9). The OMB has clearly made a commitment to improve government purchasing through CM. Since 2014, with the implementation guidance provided by the OMB in mind, contracting and acquisition professionals have created many best practices to accomplish the goals of CM.

2. Best Practices

In its 2019 report on CM, the OMB created the concept of Spend Under Management (SUM) (Weichert, 2019). An obligation is considered SUM if it is done "under smart buying practices, such as exerting strong strategic leadership/oversight and collecting and sharing critical information and data" (Weichert, 2019, p. 2). The 2019 report created a four-tiered system to determine if, and to what extent, an obligation was conducted according to SUM (Weichert, 2019). The GAO (DiNapoli, 2020) published a graphic to illustrate the four SUM tiers, and that graphic is included in this report as Figure 4.



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Figure 4. OMB Category Management SUM Tiers. Source: DiNapoli (2020, p. 11).

When the 2019 OMB report on CM was amended in 2021, SUM Tier 0 was eliminated, but Tiers 1 through 3 remain as of this writing (Miller, 2021). Any obligation that falls within Tiers 1 to 3 are considered CM best practices (Miller, 2021). In order to account for both agency and government-wide SUM, the General Services Administration (GSA) created a publicly accessible dashboard called the *Government-Wide Category Management (GWCM) Executive Summary Dashboard*. According to this dashboard, the 2022 governmental goals are to have 70% of its obligations be in accordance with SUM and to have 12% of total obligations fall under Tier 3, Best in Class (BIC) (General Services Administration [GSA], 2022b).

BIC contracts are contract vehicles that have been identified "as offering the best pricing and terms and conditions within the Federal marketplace and reflecting the strongest contract management practices" (Weichert, 2019, p. 5). The use of these BIC contracts is a government acquisition best practice according to SUM Tier 3 (Miller,



2021). Currently, according to the GSA *Guide to Category Management*, there are 10 CM categories and 38 BIC contracts (GSA, 2022a). Some of these BIC contracts are mandatory, such as the contracts for motor vehicle purchasing, and others are not, such as the BIC contracts for medical equipment (GSA, 2022a). These BIC contracts mimic the industry best practice of center-led sourcing (Agndal et al., 2007), since enterprise or agency contracting offices will create the contract and then the contracting office that works directly with the end user will submit the delivery order using the established contract.

Academic research argues for the use of contract vehicles to improve acquisition efficiency and to achieve cost savings, but this is not always a best practice. Lyons et al. (2014) argued for the creation of indefinite delivery/indefinite quantity (ID/IQ) contracts at the Naval Postgraduate School (NPS) to reduce administrative costs and lead time. Further, Plasencio and Lingle (2019) argued for the use of indefinite delivery vehicles (IDVs) in the Army in order to reduce total cost of ownership for professional services. Both of these arguments are in support of the use of contract vehicles to improve acquisition efficiency, yet only Plasencio and Lingle's (2019) solution would qualify as a best practice. To qualify as SUM, an obligation must be spent through the use of a contract vehicle that either any office within an agency or within the government can use (Weichart, 2019). The recommendation from Lyons et al. (2014) argues for the creation of a contract vehicle that only the NPS contracting office could use, so although the vehicle itself may increase the efficiency at NPS, it would not be a Navy (Tier 1) or government-wide (Tier 2) best practice. On the contrary, the vehicles created through the Plasencio and Lingle (2019) recommendation would be available for use by any contracting office within the Army, which would qualify its use as Tier 1 SUM and a best practice.

The government has made its intentions to improve purchasing through the use of CM clear. According to the OMB, before a CM strategy can be executed, the acquisition team must conduct category planning (OMB, 2015). One critical aspect of category planning is a spend analysis (OMB, 2015).



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL
D. SPEND ANALYSIS

A spend analysis is a starting point for an organization to begin the process of making purchasing a more strategic effort (OMB, 2015). Both the public and private sectors agree that the spend analysis is a first step in establishing any strategic purchasing practices. The *Government-Wide Category Management Guidance Document* indicates that "a key preliminary step for the category team is to understand spend in the category" (OMB, 2015, p. 20). Further, in the same report, the OMB designated spend analysis as the first step in the CM operating model (OMB, 2015). Pandit and Marmanis (2008) stated, "Spend analysis is the starting point of strategic sourcing and creates the foundation for spend visibility, compliance, and control" (p. 5).

For the public sector, the OMB has defined spend analysis as "the process of gathering and assembling a clean spend dataset and then using that data to understand current performance and opportunities, understand trends, and establish baselines for category and sourcing strategy" (OMB, 2015, p. 20). Similarly, Moore et al. (2004), while working for the RAND Corporation, which is an organization that analyzes both public and private sector challenges, stated, "A spend analysis integrates internal spend data and external supplier and market data and applies analytical and benchmarking techniques to help identify risks and opportunities for performance improvements and savings" (p. 8). Both sectors agree that a spend analysis is used to understand past and current organizational spend in order to create future spending strategies that take advantage of opportunities within the marketplace.

1. Requirements for a Spend Analysis

An organization must have access to accurate and complete spend data in order to conduct a spend analysis (Moore et al., 2004). There are many commercially available accounting systems that an organization can purchase and utilize for the purpose of tracking spend history. Given the complexity and volume of government purchasing, accessing complete and accurate government spend data is more challenging (Moore et al., 2004). To support this effort, the government created the Digital Accountability and Transparency Act of 2014. The purpose of this act was to "establish Government-wide data standards for financial data and provide consistent, reliable, and searchable



Government-wide spending data" (Digital Accountability and Transparency Act, 2014, p. 1146). This act (Digital Accountability and Transparency Act, 2014) established USAspending.gov as the official source of spend data submitted by federal agencies, although the OMB indicated that spend data may also "be pulled from sources including [Federal Procurement Data System (FPDS)], agency purchasing and financial systems, and data from key partners such as GSA and suppliers" (OMB, 2015, p. 21). According to the GAO, USAspending.gov includes data that are inputted to other government-wide reporting systems such as FPDS, which is the database that the DoD mandates to report contracting information (Sager, 2021a). Regardless of the specific source, access to robust spend data is the primary requirement for a spend analysis, and although this may seem simple, it can be challenging (Moore et al., 2004).

2. Limitations on Spend Analysis

The quality of a spend analysis is limited by the quality of the data that are analyzed. In a report prepared for Congress in 2015 and updated in 2018, the Congressional Research Service (CRS) cited two limitations with regards to FPDS data (Schwartz et al., 2018). These limitations are the reliability of the data reported on FPDS and the varied searchability of the data depending on the search parameters (Schwartz et al., 2018). Despite the shortcomings, the CRA did also state that any errors in FPDS most likely represent a small amount of total contract obligation numbers and that, in sum, FPDS is one of the best government contract tracking systems in the world (Schwartz et al., 2018). When conducting a spend analysis at NPS, Brill and Surarujiroj (2019) identified the two limitations that were cited by the CRS and added a third limitation that only a single PSC can be used when inputting contract data for complex acquisitions. This can lead to a misrepresentation of spend data (Brill & Surarujiroj, 2019). This third limitation led to their primary recommendation stemming from their spend analysis, which was "to implement a more robust taxonomy structure for more specific categorization of the underlying requirements" (Brill & Surarujiroj, 2019, p. 44). Although this recommendation may improve the process of conducting a spend analysis, no changes have been made by the government to improve the PSC taxonomy system since that report in 2019.



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL While conducting a review of the usefulness of USAspending.gov, the GAO conducted interviews to gather data on user's perspectives of the website (Sager, 2021a). The GAO concluded that users "encountered challenges with the timeliness and accuracy of data," and users "cited limited or lack of availability of specific data they were searching for" (Sager, 2021a, p. 13). Considering this GAO report was published in December 2021, this issue with government procurement reporting data accuracy is still relevant.

The OMB also permits data for a spend analysis to be pulled from agency purchasing and financial systems (OMB, 2015). These systems come in a variety of forms, and the data may or may not be publicly available for analysis. According to Federal Acquisition Regulation (FAR) 4.606(a), all contract actions above the micropurchase threshold, with some exceptions, must be reported to FPDS, but the FAR does not require the agency to maintain any sort of in-house agency purchasing and financial systems (FAR 4.606, 2022). Therefore, a final limitation on a spend analysis could be discrepancies between the data available through FPDS and agency purchasing and financial systems. Given this situation, the analyst must decide which data appear to be more accurate when conducting the spend analysis.

E. SUMMARY

The purpose of this chapter was to present a literature review on RDT, portfolio management, CM, and spend analysis. This chapter detailed the background of RDT and why it is a foundational theory used to analyze contractual relationships. This chapter discussed the Kraljic portfolio management model and how it can be used to apply RDT to an organization's procurement strategy. This chapter discussed the literature pertaining to CM, how CM is utilized within the DoD, and the CM best practices. Finally, this chapter discussed spend analysis, how it is used to inform CM, and its limitations.

Chapter III will highlight relevant background information on MARCORLOGCOM, which is the organization that we will conduct our research on.



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III. MARINE CORPS LOGISTICS COMMAND

The purpose of this chapter is to highlight relevant background information on MARCORLOGCOM. In this chapter, we will discuss MARCORLOGCOM's command operations, organizational history, and current operations. Chapter III will conclude with a summary of the chapter content.

A. COMMAND OPERATIONS

The mission of MARCORLOGCOM is to provide "globally responsive ground equipment inventory control and integrated operational-level logistics capabilities to maximize Marine-Corps materiel readiness and sustainment" (A. Gonzales, PowerPoint slides, June 13, 2022, slide 2). This mission is derived from the Marine Corps Title 10 responsibilities to equip the force (A. Gonzales, PowerPoint slides, June 13, 2022).

In FY 2022, the Marine Corps received an annual budget of \$49.47 billion (Duffin, 2022). As a subset of the Marine Corps, MARCORLOGCOM received a portion of this budget based off of a number of factors. Figure 5 depicts the change in budget from FY 2001 to FY 2023 for both the U.S. Navy and U.S. Marine Corps. The oscillations between fiscal years can be attributed to several factors, including change in presidential administrations and the 2019 coronavirus pandemic, to name a few.





Figure 5. Budget of the U.S. Navy and U.S. Marine Corps from FY 2001 to FY 2023. Source: Duffin (2022).

B. ORGANIZATION

There are three levels of logistics that the Marine Corp operates: strategic-level logistics, operational-level logistics, and tactical-level logistics (A. Gonzales, PowerPoint slides, June 13, 2022). MARCORLOGCOM conducts the logistics for purchased supplies and services and determines how these procured items will be distributed among the Marine Expeditionary Forces (MEF) (A. Gonzales, PowerPoint slides, June 13, 2022). In doing so, the command falls under operational-level logistics.

MARCORLOGCOM consists of a Headquarters Group, which is divided into two categories—line functions, integration, and support—and three subordinate commands (A. Gonzales, PowerPoint slides, June 13, 2022). The line functions encompass four centers: Weapon Systems Management Center (WSMC), Logistics Services Management Center (LSMC), Maintenance Management Center (MMC), and Distribution Management Center (DMC) (A. Gonzales, PowerPoint slides, June 13, 2022). The integration and support groups consist of an Operations Directorate and Logistics Capabilities Center (A. Gonzales, PowerPoint slides, June 13, 2022). Lastly, the subordinate commands consist of the Marine Depot Maintenance Command (MDMC),



Marine Corps Logistics Command (Forward) (LOGCOM [FWD]), and the Blount Island Command (BICmd) (A. Gonzales, PowerPoint slides, June 13, 2022). Figure 6 outlines the organizational structure of MARCORLOGCOM.



Figure 6. MARCORLOGCOM Organizational Structure. Source: Broadmeadow (n.d., p. 7).

C. HISTORY

In 1978, the Marine Corps Supply Center was restructured to perform "the full spectrum of logistics support functions required to sustain the life cycle of the Marine Corps weapon systems," rebranding it to become Marine Corps Logistics Base (MCLB) Albany (U.S. Marine Corps [USMC], n.d.). Later in 1990, MCLB Albany, MCLB Barstow, and BICmd were reorganized to fall under the commanding general in Albany (USMC, n.d.). Finally, in 2003, MCLB underwent another reshuffle and merged with Marine Corps Materiel Command (MATCOM) to become today's MARCORLOGCOM (USMC, n.d.). Since 2003, MARCORLOGCOM's objective has remained the same: "to ensure that Marines in harm's way have every measure of logistics support to accomplish their mission" (USMC, n.d.).



D. CURRENT OPERATIONS

MARCORLOGCOM currently operates with twelve members having warrant authority (A. Gonzales, MARCORLOGCOM Operational Contracting Support Officer, personal communication, June 13, 2022). The command maintains five unlimited warrants, one \$25 million warrant, three \$1 million warrants, and three simplified acquisition threshold (SAT) warrants (A. Gonzales, MARCORLOGCOM Operational Contracting Support Officer, personal communication, June 13, 2022). The majority of the purchases made within MARCORLOGCOM fall under the streamlined acquisition procedures (SAP), which allows the command to not require an abundant amount of high dollar value warrant holders (A. Gonzales, MARCORLOGCOM Operational Contracting Support Officer, personal communication, June 13, 2022).

The command is currently comprised of 4,185 personnel—2,144 civilian, 228 military enlisted, 74 military officers, and 1,739 contractors—spread across different locations (A. Gonzales, PowerPoint slides, June 13, 2022). Figure 7 further breaks down the command distribution.



Figure 7. MARCORLOGCOM Personnel Distribution. Source: A. Gonzales (PowerPoint slides, June 13, 2022, slide 14).



A main goal of MARCORLOGCOM personnel is to be the "Marine Corps functional experts for supply, maintenance, distribution and prepositioning" (Broadmeadow, n.d., p. 23). In doing so, they promote "dynamic and flexible" processes and remain fixed to sustaining what they do well: "embrac [ing] and incorporat [ing] change, and progress [ing] forward to adapt and achieve excellence" (Broadmeadow, n.d., p. 23).

E. SUMMARY

The purpose of this chapter was to highlight relevant background information on MARCORLOGCOM. In this chapter, we discussed MARCORLOGCOM's command operations, organization, history, and current operations.

In Chapter IV we will detail the methodology that we will use to conduct our research.



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IV. METHODOLOGY

The purpose of Chapter IV is to discuss the methodology that we will use to conduct our research. We will first discuss the sources where we will obtain our data from. Next, we will detail how we will access the data. Finally, we will discuss how we will analyze the data to conduct our spend analysis. Chapter IV will conclude with a summary of the chapter's content.

A. DATA SOURCES

We will obtain separate datasets from both MARCORLOGCOM and the Federal Procurement Data System—Next Generation (FPDS-NG) to conduct our research. When MARCORLOGCOM requested that this research be conducted, a representative from its organization stated that they maintain an internal record of its contracting history. We will obtain this record as one of our data sources. Furthermore, every federal agency is required to follow the uniformed reporting requirements for FPDS-NG (FAR 4.606, 2022). Contracting agencies are required to report multiple fields of data, including the contract number, reference number (if applicable), procurement instrument identifier (PIID), obligation amount, product service code (PSC) and other pertinent information regarding the contract action (FAR 4.606, 2022). We will obtain MARCORLOGCOM's spend history from FPDS-NG as our second data source.

B. DATA ACCESS

When we agreed to conduct this research for MARCORLOGCOM, we had a meeting with a variety of personnel from its organization. Specifically, one meeting member stated that she would be our point of contact (POC) for any information that we required from the command. To access MARCORLOGCOM's internal spend record, we will email our POC at the command and request all of the data that we are interested in. We will request for her to email us the data in a Microsoft Excel spreadsheet and to include as many of the following fields of information as possible: contract number, reference ID, contract type, contact obligation (\$), award date, PSC, North American Industry Classification System (NAICS) code, and contractor's name and/or unique



entity identification (UEID). We will request that she send us this information for as many fiscal years (FY) as possible.

Furthermore, in our original meeting with the MARCORLOGCOM personnel, they informed us that the command uses Department of Defense Activity Address Code (DoDAAC) M67004 for all its contracting actions. In order to access the MARCORLOGCOM spend data from FPDS-NG, we will search this DoDAAC in the online FPDS-NG database that is maintained at www.fpds.gov. The FPDS-NG website is available for public use, and the data that we need to access does not require any additional permissions. We will then export the results of this search to a comma separated values (CSV) file. We will export the contract actions from the maximum number of FYs that FPDS-NG will export to a single CSV file. We will export at least the following fields of data for each contract action exported from FPDS-NG: contract number, reference ID, contract type, contact obligation (\$), award date, PSC, NAICS code, and ultimate parent legal business name.

C. DATA ANALYSIS

Once we obtain the data sets from both MARCORLOGCOM and FPDS-NG, we will compare the data sets. We will determine which data set contains more of the information that we will need for our spend analysis. We will consider which data set is more complete with regards to the following data fields: contract ID, reference ID, contract type, contact obligation (\$), award date, PSC, NAICS code, and ultimate parent legal business name and/or UEID. We will also consider which data set contains information on the greater number of FYs. Once we select which data set is more complete, we will use only this data set for the remainder of our research.

Once we select the data set that we will use for our spend analysis, we will analyze it using functions that are native to Microsoft Excel. Primarily, we will use the pivot table function to compare two or more aspects of the data. Table 1 displays the pivot tables that we anticipate we will create during our research.

Table 1.List of Anticipated Pivot Tables

Total Spend by Year



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL

Total Spend by PSC
Total Spend by Contractor
Count and Percentage of Total Contract Actions Awarded by Contractor
Top 10 Contractor Earnings within the Top 10 Most Valued PSCs
Total Spend, Percentage of Total Spend, and Count of Total Awards by Contract
Туре
Total Spend by Contract ID
Total Spend by Reference IDV
Total Spend by Contractor and Count of Total Awards by Contractor within Highest
Valued PSC
Total Spend by Reference IDV and Contract ID within Highest Valued PSC

Once we create the pivot tables, we will sort the results using the `sort` function that is native to Excel in order to find the values we seek. We are particularly interested in determining which PSC MARCORLOGCOM spends the most money on. One we determine this; we will conduct a further study into this PSC. Currently, we believe the pivot table results will provide enough data to support sound conclusions and recommendations for MARCORLOGCOM.

After we create all the pivot tables, we will use various graphing functions that are native to Microsoft Excel to represent the results in Chapter V. If the results are better suited to a table format, we will provide the table in Chapter V. We are most interested in determining the most common categories of MARCORLOGCOM's spend, the contractors that the command predominantly awards to, and the contract types that the command predominantly awards. We will provide our findings in Chapter V.

D. SUMMARY

The purpose of Chapter IV was to discuss the methodology that we will use to conduct our research. We first discussed the sources that we will obtain our data from. Next, we detailed how we will access the data. Finally, we discussed how we will analyze the data to conduct our spend analysis.

Chapter V will detail the results of our spend analysis, the implications of the results and our recommendations to MARCORLOGCOM on how it can improve the implementation of category management (CM) into its contracting strategy.



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V. FINDINGS

The purpose of Chapter V is to present the findings from our research on MARCORLOGCOM's contracting spend data. First, we will discuss how we selected the data set we chose to analyze for our research. Second, we will discuss the general spend characteristics and trends within the data. Next, we will detail MARCORLOGCOM's total spend by product service code (PSC) and total spend by contractor. We will then detail the command's total spend by contract type and report the largest contracts awarded by the command. We will then report the findings from our spend analysis into MARCORLOGCOM's most utilized PSC. Finally, we will report the implications from our findings and provide our recommendations to MARCORLOGCOM. Chapter V will conclude with a summary of the chapter contents.

A. DATA SELECTION

For our research, we planned to gather data from two separate sources and then select which data set to use based on the quality and scope of the data obtained. We were successful in gathering data from both sources. We obtained our first data set from our Point of Contact (POC) at MARCORLOGCOM. She emailed us the internal spend record maintained by the command in a Microsoft Excel file. This dataset included the following fields for each contract action: fiscal year (FY), PSC, North American Industry Classification System (NAICS) code, unique entity ID (UEID), and action obligation. This data set contained data from FY 2012 to FY 2021.

We collected our second data set from the Federal Procurement Data System— Next Generation (FPDS-NG) database maintained at www.fpds.gov in May 2022 (FPDS-NG, 2022). We searched for Department of Defense activity address code (DoDAAC) M67004 on the website to find the data we needed. We exported the results of this search and included the following fields for each contract: contract ID, reference indefinite delivery vehicle (IDV), award/ interdepartmental vehicle type, action obligation, date signed, PSC type, PSC, NAICS code, and ultimate parent legal business name. We exported the contract actions from FY 2007 to FY 2022, since this was the greatest number of actions that FPDS-NG was able to export in a single file.



Since the dataset we obtained from FPDS-NG (2022) included a larger scope of data from more FYs as compared to the data provided by MARCORLOGCOM, we chose to conduct our research on the FPDS-NG data set. As a result, all of the findings that we will present and discuss in this research were adapted from the FPDS-NG data set that we retrieved in May 2022.

B. GENERAL SPEND CHARACTERISTICS AND TRENDS

From FY 2007 to FY 2022, MARCORLOGCOM spent a grand total of \$5,222,563,737.14 on goods and services (FPDS-NG, 2022). The average amount spent per year (excluding FY 2022 since the year is not yet over) was \$340,291,914, while the median amount spent per year totaled \$364,576,862. From FY 2007 to FY 2016, MARCORLOGCOM consistently spent more than \$350 million annually. Conversely, from FY 2017 to FY 2021, the command spent less than \$275 million annually. MARCORLOGCOM allocated the command's highest total spend in FY 2012 with a total spend of \$442,919,791.03. MARCORLOGCOM allocated the command's lowest total spend in FY 2017 with a total spend of \$213,464,975.28. MARCORLOGCOM's annual spend data since FY 2007, as of August 17, 2022, is depicted in Table 2 and in Figure 8, respectively.



Year	👻 Total	Obligation (\$)
± 2007	\$	351,545,228.51
± 2008	\$	398,822,532.10
± 2009	\$	397,454,785.02
± 2010	\$	418,025,074.96
± 2011	\$	382,675,125.74
± 2012	\$	442,919,791.03
± 2013	\$	398,523,994.53
± 2014	\$	379,643,292.55
± 2015	\$	354,136,987.26
± 2016	\$	364,576,862.51
± 2017	\$	213,464,975.28
± 2018	\$	235,651,454.37
± 2019	\$	234,557,505.75
± 2020	\$	274,480,595.17
± 2021	\$	257,900,519.77
± 2022	\$	118,185,012.59
Grand Tota	I \$	5,222,563,737.14

Table 2.MARCORLOGCOM Total Obligation (\$) by Year. Adapted from
FPDS-NG (2022).



Figure 8. MARCORLOGCOM Total Obligation (\$) by Year. Adapted from FPDS-NG (2022).



C. TOTAL SPEND BY PRODUCT OR SERVICE CODE

The DoD utilizes PSCs to categorize federal acquisitions for all goods and services. To gain a better understanding of how MARCORLOGCOM appropriates its budget, we analyzed the command's total spend by PSC. Since FY 2007, MARCOLOGCOM purchased goods and services from 745 unique PSCs (FPDS-NG, 2022). Although the command made purchases from a variety of PSCs, 69% of the command's total spend (\$3,592,730,969.21 of the total budget) was distributed among only 10 PSCs. More specifically, MARCOLOGCOM allocated the most (28% of total spend) to PSC R706: Logistics Support Services. The command spent a total of \$1,486,096,410.76 on goods and services coded by R706. MARCORLOGCOM's second most utilized PSC is PSC J099: Maintenance; Repair of Miscellaneous Equipment. The command spent a total of \$539,378,511.83 within this PSC, comprising 10% of its total spend. The aforementioned data supports the finding that MARCORLOGCOM spends a significant portion of its total spend between two primary PSCs. MARCORLOGCOM's top 10 PSCs and associated total spend values from FY 2007 to FY 2022, are displayed in Figure 9 and in Table 3, respectively. Additionally, Table 3 further annotates the percentage of MARCORLOGCOM's total spend associated with each PSC.





Figure 9. MARCORLOGCOM's Top 10 PSCs and Associated Total Obligation Values (\$). Adapted from FPDS-NG (2022).

Table 3. MARCORLOGCOM's Top 10 PSCs with Associated Total Obligation (\$) and Percentage of the Total Spend Values (%). Adapted from FPDS-NG (2022).

			Percent of
	PSC 🔍	Total Obligation (\$)	Total Spend
1	R706	\$1,486,096,410.76	28%
2	J099	\$ 539,378,511.83	10%
3	R408	\$ 317,119,320.49	6%
4	M1GZ	\$ 312,761,860.94	6%
5	J049	\$ 185,919,090.41	4%
6	2590	\$ 181,755,159.12	3%
7	J017	\$ 157,928,384.34	3%
8	M179	\$ 142,220,601.44	3%
9	J023	\$ 138,364,745.09	3%
10	J010	\$ 131,186,884.79	3%



Table 4 displays the description of each of MARCORLOGCOM's top 10 PSCs. We gathered the description of each PSC from the FY 2022 edition of the *FPDS PSC Manual* (General Services Administration [GSA], 2021).

Table 4.	Description of MARCORLOGCOM's top 10 PSCs. Source: GSA
	(2021).

PSC	Description
R706	Logistics Support Services
J099	Maintenance; Repair of Miscellaneous Equipment
R408	Program Management/Support Services
M1GZ	Operation of Other Warehouse Buildings
J049	Maintenance /Repair /Rebuild of Equipment-Maintenance and Repair
	Shop Equipment
2590	Miscellaneous Vehicular Components
J017	Maintenance/Repair/Rebuild of Equipment—Aircraft Launching,
	Landing, and Ground Handling Equipment
M179	Operation of Government Other Warehouse Buildings
J023	Maintenance, Repair and Rebuilding of Equipment: Ground Effect
	Vehicles, Motor Vehicles, Trailers, and Cycles
J010	Maintenance/Repair/Rebuild of Equipment—Weapons

D. TOTAL SPEND BY CONTRACTOR

The next area of spend we analyzed was MARCORLOGCOM's total spend by DoD contractor. From FY 2007 to FY 2022, MARCORLOGCOM awarded contracts to 2,688 contractors (FPDS-NG, 2022). Despite awarding contract actions to a large pool of contractors, 60% of MARCORLOGCOM's total spend was awarded to just 10 contractors. Specifically, Honeywell International, Raytheon Company, and KBR each respectively earned 16%, 15% and 8% of MARCORLOGCOM's total spend. Interestingly, in August 2016, KBR acquired Honeywell Technology Solutions, which was a subsidiary of Honeywell International Inc. (KBR, 2016). According to the FPDS-NG (2022) data, Honeywell Technology Solutions was the exclusive subsidiary of Honeywell International Inc., which worked with MARCORLOGCOM. Due to this acquisition, all the contracts awarded to Honeywell International by MARCORLOGCOM are now owned by KBR. Given this information, a total of 24% of MARCORLOGCOM's total spend, since FY 2007, was allocated to KBR, and 15% was



allocated to Raytheon Company. MARCORLOGCOM's top 10 contractors', associated total spend values and percentages of the total spend are displayed in Table 5.

	Contractor	Total Obligation (\$)	% of Total Spend
1	HONEYWELL INTERNATIONAL INC.	\$ 822,424,733.60	16%
2	RAYTHEON COMPANY	\$ 763,411,804.14	15%
3	KBR INC.	\$ 405,001,973.92	8%
4	LION-VALLEN LIMITED PARTNERSHIP	\$ 321,774,881.87	6%
5	URS CORPORATION	\$ 190,549,959.57	4%
6	OSHKOSH CORPORATION	\$ 190,051,109.95	4%
7	PRIMETECH INTERNATIONAL INC.	\$ 179,359,172.84	3%
8	AECOM	\$ 98,879,735.12	2%
9	Ranger International Services Group Inc.	\$ 85,173,155.11	2%
10	NEW BREED HOLDING COMPANY	\$ 84,439,684.15	2%

Table 5.MARCORLOGCOM's Top 10 Highest Earning DoD Contractorswith Associated Obligation Values (\$) and Percentage of the Total SpendValues. Adapted from FPDS (2022).

The FPDS-NG (2022) data indicated that MARCORLOGCOM issued 28,782 contract actions from FY 2007 to FY 2022. Of these 28,782 actions, a total of 903 contractors were issued only one award, while 1,785 contractors received two or more contract actions from the command. Furthermore, 448 contractors were awarded 10 or more contract actions from MARCORLOGCOM. Although the command maintains a vast pool of contractors to award to, three companies were awarded significantly more contracts than the rest from FY 2007 to FY 2022. Oshkosh Corporation, Raytheon Company, and Honeywell International, respectively, received 1,900; 1,238; and 1,030— or 7%, 4%, and 4% of MARCORLOGCOM total contracts during this time period. The count of contracts awarded to MARCORLOGCOM's top 10 most awarded contractors, and the associated percentage of the command's total awards are displayed in Table 6.



		Total Contract	Percentage of
	Contractor 🗸	Actions Awarded	Total Awards
1	OSHKOSH CORPORATION	1900	7%
2	RAYTHEON COMPANY	1238	4%
3	HONEYWELL INTERNATIONAL INC.	1030	4%
4	KBR INC.	563	2%
5	VERIZON COMMUNICATIONS INC.	467	2%
6	GLOBAL INNOVATION PARTNERS LLC	380	1%
7	L-3 COMMUNICATIONS HOLDINGS INC.	364	1%
8	LION-VALLEN LIMITED PARTNERSHIP	335	1%
9	AURA-SHIELD INC.	329	1%
10	AGILENT TECHNOLOGIES INC.	278	1%

Table 6.MARCORLOGCOM Top 10 Most Awarded DoD Contractorswith Associated Count of Total Awards. Adapted from FPDS (2022).

Although MARCORLOGCOM maintains a large pool of DoD contractors and awards contracts under many PSCs, the command awards a large portion of its contract actions to a small pool of contractors under two primary PSCs. Based on this observation, much of the rest of our research will focus on spend data associated with MARCORLOGCOM's most utilized PSCs and DoD contractors.

E. SPEND WITHIN THE TOP PSCS

From FY 2007 to FY 2022, MARCORLOGCOM allocated 69% of its total spend to 10 PSCs and 60% of its total spend among 10 DoD contractors (FPDS-NG, 2022). Further analysis indicates, however, that the majority of the spend within the top 10 PSCs was allocated to the top 10 highest earning contractors as well. Table 7 displays this finding and further shows how much money each of the top 10 highest earning contractors earned within the top 10 PSCs. Additionally, Table 7 depicts the percentage of spend (by PSC) that was allocated to the top 10 highest earning contractors. Table 7 is depicted in two snapshots to best display the data.



Table 7.Spend on Top 10 Contractors within the Top 10 PSCs with
Associated Total Spend Values (\$). Adapted from FPDS (2022).

	Contractor		R706	J099	R408	M1GZ	J049
1	HONEYWELL INTERNATIONAL INC.	\$	633,419,759.35		\$ 19,388,980.11		\$ 164,170,352.78
2	RAYTHEON COMPANY	\$	40,612,722.99	\$ 533,036,617.27	\$ 1,017,401.92		
3	KBR INC.	\$	409,652,987.57		\$ (6,417,923.86)		
- 4	LION-VALLEN LIMITED PARTNERSHIP					\$ 149,049,481.16	
5	URS CORPORATION						
6	OSHKOSH CORPORATION						
7	PRIMETECH INTERNATIONAL INC.	\$	36,171,934.11		\$ 6,688,064.31	\$ 83,882,617.92	
8	AECOM						
9	Ranger International Services Group Inc.	\$	2,684,026.22		\$ 82,342,354.89		
10	NEW BREED HOLDING COMPANY					\$ 26,052,083.25	
	Total Value	\$1	,122,541,430.24	\$ 533,036,617.27	\$103,018,877.37	\$ 258,984,182.33	\$ 164,170,352.78
	% of Total Spend on PSC		76%	99%	32%	83%	88%

	Contractor	2590	J017	M179	J023	J010
1	HONEYWELL INTERNATIONAL INC.					
2	RAYTHEON COMPANY					\$ 26,237.00
3	KBR INC.					
4	LION-VALLEN LIMITED PARTNERSHIP			\$108,678,831.87		
5	URS CORPORATION		\$ 83,698,557.96			\$ 106,407,279.58
6	OSHKOSH CORPORATION	\$ 148,120,318.37			\$ 33,043,436.64	
7	PRIMETECH INTERNATIONAL INC.					
8	AECOM	\$ 80,870.00	\$ 74,229,826.38			\$ 24,569,038.74
9	Ranger International Services Group Inc.					
10	NEW BREED HOLDING COMPANY			\$ 33,571,151.57		
	Total Value	\$ 148,201,188.37	\$ 157,928,384.34	\$142,249,983.44	\$ 33,043,436.64	\$ 131,002,555.32
	% of Total Spend on PSC	82%	100%	100%	24%	100%

F. CONTRACT TYPES

From FY 2007 to FY 2022, the FPDS-NG (2022) data set indicates that MARCORLOGCOM awarded various types of contracts and agreements. These contact types include basic ordering agreements (BOA), blanket purchase agreements (BPA), call blank purchasing agreements, definitive contracts (DCA), delivery orders (DO), purchase orders (PO), and indefinite delivery contracts (IDC). Table 8 displays the total number of actions, total dollars obligated, and the percentage of total spend using each contract or agreement type. The total obligation values for the BOAs, BPAs, and IDCs are blank since these types of contracts and agreements are not directly funded. To use an IDC, a funded DO is awarded in reference to the IDC. To use a BPA or a BOA, a funded "call"



is issued against the agreement. In Table 8, the total obligation value on the DO line is the aggregate dollar value of all the DOs awarded in reference to the IDCs, and the obligation value on the "Call Blanket Purchase Agreement" line is the aggregate dollar value of all the "calls" issued against the BPAs and BOAs.

Contract Type	v To	tal Obligation (\$)	Cou	nt of Total Actions	Percentage of Total Spend
BOA Basic Ordering Agreement	\$	-	\$	98.00	0%
BPA Blanket Purchase Agreement	\$	-	\$	178.00	0%
BPA Call Blanket Purchase Agreement	\$	27,889,212.87	\$	584.00	1%
DCA Definitive Contract	\$	1,171,972,640.18	\$	1,864.00	22%
DO Delivery Order	\$	3,536,772,765.71	\$	13,075.00	68%
IDC Indefinite Delivery Contract	\$	-	\$	1,067.00	0%
PO Purchase Order	\$	485,929,118.38	\$	11,916.00	9%
Grand Total	\$	5,222,563,737.14	\$	28,782.00	100%

Table 8. Total Obligation (\$), Count of Total Contract Actions, and Percentage of Total Spend by Contract Type. Adapted from FPDS (2022).

Table 8 shows that the majority of MARCORLOGCOM's contract actions were DOs, and, therefore, awarded in reference to an IDC. Table 8 further shows that 31% of MARCORLOGCOMS's total awards were DCAs and POs collectively, which are not awarded in reference to an IDC. An insignificant 1% of MARCORLOGCOM's total spend was "called" against the BPAs and BOAs. As a result, we directed the rest of our analysis of MARCORLOGCOM's use of the different contract types into the command's use of contract vehicles, which are the DOs awarded in reference to the IDCs, and standalone contracts, which are the DCAs and POs.

1. Analysis of MARCORLOGCOM's Definitive Contracts and Purchase Orders

DCAs and POs are contract types that are used to make single award purchases and are not tied to pre-existing contract vehicles or agreements. POs are utilized under simplified acquisition procedures (SAPs), and DCAs are used when SAPs are not being used. Neither contract type is awarded in reference to an IDC or to any other pre-existing contract agreement. As a result, both DCAs and POs are considered standalone contracts. From FY 2007 to FY 2022, MARCORLOGCOM awarded 1,864 DCAs and 11,916 POs



(13,780 total), with a total obligation of \$1,657,901,758.56 or 31% of the command's total spend (FPDS-NG, 2022). The average dollar value for these standalone contracts was \$120,312. Table 9 details the 10 largest DCAs and POs awarded by the MARCORLOGCOM.

	Contract Number	Total Obligated Amount (\$)
1	M6700416C0005	\$ 249,261,176.96
2	M6700499C0002	\$ 164,170,352.78
3	M6700416C0013	\$ 55,042,000.68
4	M6700421C0001	\$ 53,777,678.61
5	M6700417F2046	\$ 45,849,045.61
6	M6700418F0112	\$ 45,204,276.59
7	M6700416C0004	\$ 44,543,800.91
8	M6700416C0001	\$ 42,002,897.44
9	GST0408BF0117	\$ 38,060,962.61
10	M6700421F2005	\$ 36,050,000.00

Table 9.10 Largest DCAs and POs and Associated Dollar Value (\$).Adapted from FPDS (2022).

The data indicates that MARCORLOGCOM does use POs and DCAs to make some large dollar purchases (FPDS-NG, 2022). Specifically, the command awarded a total of 379 POs and DCAs valued at more than \$1 million. Additionally, MARCORLOGCOM awarded 13,401 DCAs and POs for less than \$1 million further indicating that the command most frequently uses these contract vehicles for small dollar purchases. Conclusively, a total of 97.2% of the DCAs and POs were valued at less than \$1 million.

At this point in our spend analysis, we were interested to see how MARCORLOGCOM's use of DCAs and POs compares to its use of IDCs.

2. Analysis of MARCORLOGCOM's Use of IDC Contract Vehicles

Table 8 indicates MARCORLOGCOM's preferred use of IDC contract vehicles in its contracting practice from FY 2007 to FY 2022. Specifically, from FY 2007, 68% of the command's total spend consisted of obligations awarded in reference to IDCs (FPDS-



NG, 2022). Of the 1,067 IDCs that the command awarded, 190 have been obligated for more than \$1 million. This means that 17% of the contract vehicles have a total obligated value greater than \$1 million. The average total obligated value of each of the IDCs is \$3,046,719, and the average number of DOs awarded against each IDC is 12. Notably, each IDC awarded by MARCORLOGCOM has been a single award IDC as opposed to a multiple award contract (MAC) IDC. This point is significant as many agencies have successfully implemented CM principles through the use of MAC contract vehicles. MARCORLOGCOM, however, did not award all of the IDCs that the command consistently utilized. For example, FA8108-09-D-0006 is MARCORLOGCOM's second most utilized IDC and was awarded by MARCORLOGCOM, since FY 2007, and the number of contract actions that were awarded in reference to them.

	IDC Number	Total Obligation	Total Awards
1	M6700409D0020	\$801,619,858.98	1,144
2	FA810809D0006	\$288,904,702.66	87
3	M6700410D0021	\$283,775,440.31	450
4	M6700419D0001	\$234,519,495.34	214
5	M6700401D0003	\$153,638,029.71	252
6	GS10F0229L	\$131,535,132.47	364
7	M6700421D0002	\$100,000,000.00	32
8	GS10F0095M	\$ 84,439,684.15	53
9	M6700401D0009	\$ 78,389,066.02	673
10	M6700413D0025	\$ 51,781,526.91	16

Table 10.10 Largest IDCs with Their Corresponding Total Obligation Value
and Count of Total Awarded Actions. Adapted from FPDS (2022).

From FY 2007, our analysis indicates that MARCORLOGCOM awarded IDCs using 490 unique PSCs (FPDS-NG, 2022). Conversely, however, the command awarded a majority of IDCs using only a select few consistent PSCs. Of the 10 largest contract vehicles awarded by MARCORLOGCOM, eight are now expired and two are current as of August 17, 2022: M67004-19-D-0001 and M67004-21-D-0002. Both current IDCs were awarded for PSC R706. The command has other active contract vehicles; however,



all of them have significantly lower ceiling amounts than the two IDCs for R706. Just like the contract vehicles previously awarded, all of the current IDCs used by MARCORLOGCOM were awarded to a single contractor. Table 11 offers more specific spend data regarding MARCORLOGCOM's 10 largest, active IDCs. This information includes the IDC number, ceiling amount, PSC, and contract expiration year.

Contract ID	Ceiling Amount (\$)	PSC Code	Expiration Year
M6700419D0001	\$949,423,564.00	R706	2027
M6700421D0002	\$259,245,671.31	R706	2026
M6700419D0002	\$42,411,283.52	J058	2022
M6700420D0003	\$41,181,360.00	1240	2025
M6700420D0002	\$18,930,294.00	J020	2024
M6700420D0005	\$9,527,173.75	5855	2025
M6700421D0001	\$6,092,907.20	V114	2025
M6700419G1000	\$5,000,000.00	J019	2024
M6700421D0003	\$3,576,220.10	J019	2023
M6700420D0010	\$2,811,002.05	1240	2025

Table 11.MARCORLOGCOM's 10 Largest IDC Contract Vehicles with
Associated Ceiling Amounts, PSC and Contract Expiration Year. Adapted
from FPDS (2022).

At this point, our research soundly indicates that PSC R706 is the most utilized PSC category by MARCORLOGCOM. From FY 2007, the command has spent the majority of its total spend on this PSC, and its two largest active IDCs are associated with this PSC as well. In order to better understand MARCORLOGCOM's spend within R706, the remainder of our research will exclusively focus on this PSC.

G. ANALYSIS OF THE MOST UTILIZED PSC: R706

Our research on MARCORLOGCOM's spend history since FY 2007 offers conclusive evidence that R706 is the command's most utilized PSC (FPDS-NG, 2022). This PSC comprised 28% of the command's total spend, nearly \$1 billion more than its



next most utilized PSC, J099. Given this information, we wanted to further direct our analysis to study PSC R706 specifically.

1. Contract Awards by Contractor

From FY 2007, the spend data reveals that MARCORLOGCOM awarded a total of 2,352 actions for PSC R706 (FPDS-NG, 2022). This value includes DCAs, POs, IDCs, and DOs awarded against the IDCs. The command awarded contracts to 63 separate contractors for this PSC. Furthermore, 50 of the 63 contractors that received an award under R706 received five or more contracts for this PSC from MARCORLOGCOM. Table 12 displays both the total obligation and the total number of contract actions awarded to the command's top 10 contractors for PSC R706.

Table 12.Top 10 Highest Earning Contractors within R706 with Associated
Total Obligation (\$) and Count of Total Awards. Adapted from FPDS
(2022).

	Contractor	То	tal Obligation (\$)	Total Awards
1	HONEYWELL INTERNATIONAL INC.	\$	633,419,759.35	907
2	KBR INC.	\$	409,652,987.57	548
3	RAYTHEON TECHNOLOGIES CORPORATION	\$	63,350,000.00	13
4	BATTELLE MEMORIAL INSTITUTE INC	\$	47,765,385.95	125
5	RAYTHEON COMPANY	\$	40,612,722.99	40
6	PROFESSIONAL ANALYSIS INC	\$	40,112,371.80	31
7	PRIMETECH INTERNATIONAL INC.	\$	36,171,934.11	65
8	BOOZ ALLEN HAMILTON HOLDING CORPORATION	\$	32,479,878.37	40
9	CGI FEDERAL INC.	\$	28,019,259.99	21
10	CGI TECHNOLOGIES AND SOLUTIONS INC.	\$	22,915,419.95	56

The top 10 highest earning contractors within R706 earned 91% of the command's total spend from FY 2007 to FY 2022 for this PSC (FPDS-NG, 2022). This is largely due to the earnings of the top two contractors within this category, Honeywell and KBR. Specifically, these two companies have earned a total of 70% of MARCORLOGCOM's total spend for this PSC. Additionally, KBR purchased Honeywell Technology Solutions in 2016 (KRB, 2016). Through this acquisition, KBR now owns 70% of MARCORLOGCOM's aggregated spend within PSC R706.



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL Furthermore, the top 10 contractors for this PSC were awarded 78% of all contract actions within this category.

2. Contracts within R706

In order to determine the prevalence of contracting vehicles within R706, we queried the data to determine the contract types awarded by the command under this PSC (FPDS-NG, 2022). Table 13 displays all the contracts and agreements awarded for PSC R706.

Table 13. Total Obligation (\$), Count of Total Contract Actions, and Percentage of Total Spend by Contract Type For PSC R706. Adapted from FPDS (2022).

				Percentage of Total
Contract Type 🗸	То	tal Obligation (\$)	Count of Total Actions	Spend
BOA Basic Ordering Agreement	\$	-	9	0%
BPA Call Blanket Purchase Agreement	\$	1,943,607.06	5	0%
DCA Definitive Contract	\$	59,025,578.26	163	4%
DO Delivery Order	\$	1,419,404,255.65	1,825	96%
IDC Indefinite Delivery Contract	\$	-	304	0%
PO Purchase Order	\$	5,722,969.79	46	0%
Grand Total	\$	1,486,096,410.76	2,352	100%

Table 13 contains one error. The FPDS-NG (2022) data set counts the modifications to the IDCs as separate contract actions. Table 13 indicates that MARCORLOGCOM awarded 304 unique IDCs, but this is not correct. We manually counted the unique IDCs in the data and determined that the command awarded 56 unique IDCs for PSC R706 rather than 304 as indicated in Table 13.

The data in Table 13 indicate that approximately 90% of all awards for this PSC were either an IDC or an associated DO, and these actions account for 96% of the total spend. Less than 5% of the spend for this PSC was awarded using DCAs and POs.

Since the command issued so many IDCs for this PSC, we wanted to see if they were all large in total dollar value. We also wanted to determine if the few POs and DCAs that the command awarded for this PSC were large in dollar value. To make this determination, we queried the FPDS-NG (2022) data to identify the contracts for R706



with the largest total obligation. Table 14 shows the 10 largest contracts awarded for PSC R706. The contracts highlighted in yellow are either a DCA or a PO, and the contracts that are not highlighted are IDCs. Table 14 additionally indicates whether the IDCs are currently active.

	Contract Number	Tota	l Obligation (\$)	Status
1	M6700409D0020	\$	801,619,858.98	Expired
2	M6700419D0001	\$	234,519,495.34	Active
3	M6700421D0002	\$	100,000,000.00	Active
4	M6700418F0112	\$	45,204,276.59	N/A
5	M6700416C0001	\$	42,002,897.44	N/A
6	M6700421F2005	\$	36,050,000.00	N/A
7	M6700419F0120	\$	31,944,345.56	N/A
4	N0017819D8338	\$	25,856,655.23	Active
8	M6700422F2006	\$	23,950,000.00	N/A
9	M6700413D0031	\$	23,057,025.72	Expired

Table 14. Largest Contracts within PSC R706 with Associated Total Obligation (\$) and Status if Applicable. Adapted from FPDS (2022).

Although many IDCs were awarded under PSC R706, not all of them were utilized for a high dollar value (FPDS-NG, 2022). In total, 15 of the IDCs awarded for PSC R706 were obligated for at least \$10 million, and 41 IDCs were obligated for less than \$10 million. Resultingly, 27% of the IDCs are valued at greater than \$10 million. Similarly, a small fraction of all the DCAs and POs were obligated at large dollar values. A total of 26 DCAs and POs out of the 409 awarded were awarded for at least \$10 million. As a result, 6% of DCAs and POs awarded by MARCORLOGCOM were awarded for more than \$10 million.

This concludes our report on the findings of our research. We will now discuss the implications of our finding and our recommendations for how MARCORLOGCOM can implement category management within its command.



H. IMPLICATIONS OF FINDINGS

Our research on MARCORLOGCOM's spend data from FY 2007 to FY 2022 revealed several implications. We will now present the implications of our findings along with a discussion of each.

1. Implication 1: All MARCORLOGCOM IDCs Are Single Award IDCs

Each IDC awarded by MARCORLOGCOM has been a single award IDC as opposed to a MAC IDC. A MAC IDC is a contract vehicle that is awarded to two or more contractors and the subsequent DOs are awarded competitively amongst the contract holders. Single award IDCs are contract vehicles that are awarded to one contractor and therefore all of the subsequent DOs are awarded non-competitively to that contractor. The fact that all of MARCORLOGCOM's IDCs are single award IDCs is significant as although the command is increasing its contracting efficiency by awarding single award IDCs, it is not gaining the additional benefit of competition that MAC IDCs offer through the competitive award of DOs. The competitive environment among MAC IDC contract holders can increase the likelihood of MARCORLOGCOM receiving the most fair and reasonable price for the subsequent DOs. This implication of the data appears to indicate that MARCORLOGCOM may not be receiving the best price for the DOs it awards in reference to its IDCs.

2. Implication 2: MARCORLOGCOM Frequently Makes Routine Purchases Using DCAs and POs

Our research supports the finding that 31% of MARCORLOGCOM's budget was appropriated as DCAs and POs. Of these awards, 379 were valued at more than \$1 million, while the remaining 13,401 or 97% were valued at less than \$1 million. This appears to indicate that MARCORLOGCOM consistently utilizes DCAs and POs for routine small dollar purchases. This implication of the data suggests that MARCORLOGCOM may increase its implementation of CM by decreasing its utilization of DCAs and POs and increasing its utilization of IDCs for more routine buys.



3. Implication 3: MARCORLOGCOM's Spend Characteristics Present a Great Opportunity to Implement CM

Although MARCORLOGCOM maintains a large pool of DoD contractors and awards contracts under many PSCs, the command primarily awards a substantial portion of its contracting actions to a small pool of contractors under two primary PSCs. The command awarded contracts for 745 unique PSCs, yet 69% of its spend was allocated to just ten PSCs. This finding indicates that MARCORLOGCOM's has a great opportunity to increase its implementation of CM practices within its contracting procedures. Specifically, based on the finding that a significant portion of the command's spend is allocated among three contractors under two PSCs, it is possible for MARCORLOGCOM to establish command-wide IDCs to contract more efficiently with these companies for the PSCs R706 and J099. Through consolidating contracting efforts to one or more IDCs, MARCORLOGCOM may increase its streamlined contracting efforts and its utilization of the OMB recommended best CM practices

4. Implication 4: MARCORLOGCOM Awards a Large Number of IDCs, yet Does Not Maximize the Use of Many

A fourth implication of our spend analysis was that MARCORLOGCOM frequently awarded and utilized IDCs from FY 2007 to FY 2022. The command awarded 1,067 IDCs since FY 2007. In total, 68% of the command's total spend resulted from IDCs and 17% of all the IDCs are valued at over \$1 million. The average total obligated value of each of the IDCs was \$3,046,719 and the average number of DOs awarded against each IDC was 12.

Although the command does appear to be implementing CM through the utilization of IDCs, the data appears to indicate that the process could be made more efficient. The command has awarded many IDCs in total, yet the average number of DOs awarded in reference to each IDC and the average total obligated value of each IDC are both relatively low. In addition, the command awarded a total of 56 IDCs for PSC R706 alone. It appears that the command is awarding a lot of IDCs, yet not fully utilizing many of them. Our findings appear to indicate that although MARCORLOGCOM is attempting



to implement CM through the use of IDCs, it are not gaining the full benefit since it is not utilizing each IDC to its full capacity.

5. Implication 5: MARCORLOGCOM Appears to Have Implemented CM Strategies for PSC R706

R706 is the PSC that MARCORLOGCOM obligates the most money on and comprises 28% of the command's overall spend. Furthermore, this PSC received nearly \$1 billion more in obligated funds since FY 2007 than the second most awarded PSC, J099. Also, the command's two largest active IDCs were awarded for PSC R706. Since R706 is the most valued PSC, and the largest active IDCs are awarded for this PSC, it appears that MARCORLOGCOM has identified its most utilized PSC and has implemented CM practices within its acquisition procedures for this PSC. Specifically, instead of primarily awarding DCAs and POs, the command awards the great majority of its spend (96% of total spend on R706) as DOs in reference to two major IDCs for this PSC.

6. Implication 6: MARCORLOGCOM Awarded Contracts for Many PSCs

MARCORLOGCOM awarded contracts for a total of 745 PSCs. Many of these PSCs were purchased infrequently or as little as one time since FY 2007. These infrequently purchased PSCs were almost exclusively purchased through the use of POs and DCAs. Purchasing these PSCs using DCAs, and PO is inefficient, time-consuming and administratively burdensome. This finding indicates that MARCORLOGCOM may gain efficacy by categorizing these infrequently purchased PSCs to create strategies to purchase them more efficiently when required.

Based on the implications of our findings, we will now make three recommendations to MARCORLOGCOM on how it may implement or further implement CM strategies to improve its contracting processes.

I. RECOMMENDATIONS

Our research on MARCORLOGCOM's contracting history from FY 2007 to FY 2022 revealed opportunities for the command to further implement CM into its



contracting strategy. We make the following three recommendations to MARCORLOGCOM based on the implications of our research findings.

1. Recommendation 1: Use Multiple Award Contract (MAC) IDCs

Our first recommendation to MARCORLOGCOM is to use MAC IDCs rather than single award IDCs. MAC IDCs help to reduce administrative costs and increase the efficiency associated with contracting while simultaneously helping to drive down costs of DOs through the presence of competition amongst offerors. Single award IDCs are good when there is only one contractor capable of meeting the needs of the contract, yet MAC IDCs are superior when multiple contractors are capable. Under a MAC IDC, contracting procedures are better streamlined and procurements under categorized PSC occur faster, more efficiently and usually for a better price.

2. Recommendation II: Increase the Use of IDCs

Our second recommendation for MARCORLOGCOM is to increase its use of IDCs. Currently, an estimated 31% of the command's budget is allocated through DCAs and POs. Many of these contracts appear to be for either small dollar purchases or for PSCs that are not frequently purchased. MARCORLOGCOM may be able to categorize many of these PSCs and award IDCs within those categories to help streamline its acquisition processes and reduce its administrative burden.

3. Recommendation III: Increase Coordination, Communication and Organization

Our third recommendation is to increase communication, coordination, and organization amongst the contracting teams within its command. We recommend MARCORLOGCOM contracting units increase its internal communication in the market research phase of the contracting process to determine if an IDC for a given PSC exists. So, rather than going through the process of awarding new IDCs for the same PSC, the command can use the existing IDCs more frequently. We also recommend that when a contracting unit plans to award an IDC, it coordinates with other contracting units to determine if that IDC can be expanded to accommodate more needs and communicate the new IDC after award.



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL As we noted in the Implications section, MARCORLOGCOM's spend data presents a great opportunity to implement major IDCs, and it appears that the command has already done that for PSC R706. We recommend that the command continues to coordinate on how it can expand its used of IDCs and CM strategies for more PSCs than just R706. In general, we recommend that all MARCORLOGCOM contracting units work together to award IDCs that are usable by the entire command in order to decrease the administrative burden of awarding and administering contracts for routine buys.

J. SUMMARY

The purpose of Chapter V was to present the findings from our research on MARCORLOGCOM's spend data. First, we discussed how we selected the data set we analyzed for our research. Second, we discussed the general spend characteristics and trends within the data. Next, we detailed MARCORLOGCOM's total spend by PSC and total spend by contractor. We then detailed the command's total spend by contract type and reported the largest contracts awarded by the command. We then reported our findings from our spend analysis into MARCORLOGCOM's most utilized PSC, R706. Finally, we discussed the implications of our findings and provided three recommendations to MARCORLOGCOM to further implement CM.

Chapter VI will provide a summary of our research, our conclusions and areas for further research.



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VI. SUMMARY, CONCLUSIONS AND AREAS FOR FURTHER RESEARCH

The purpose of this chapter is to provide a summary of our research and the answers to our research questions. In this chapter, we will summarize the background material associated with our subject matter, provide our conclusions with regards to our research questions and discuss areas for further research.

A. SUMMARY

The Department of the Navy allocates billions of dollars annually in order to meet the needs of its members (Duffin, 2022). Being a subset of the Navy, the Marine Corps gets apportioned a percentage of those funds to do likewise, which flows into the budget of the MARCORLOGCOM. It is the job of the contracting professionals within MARCORLOGCOM to spend that money efficiently. The purpose of our research was to perform a spend analysis on the command's purchasing data from fiscal year (FY) 2007 to FY 2022 to allow us to identify ways in which the command could improve efficiencies and maximize cost savings. Based on the findings from our research we recommended ways the command can utilize category management (CM) opportunities and practices.

B. CONCLUSIONS

We made the following conclusions based on the findings from research on MARCORLOGCOM's contracting history from FY 2007 to FY 2022.

1. What Are MARCORLOGCOM's Major Areas of Spend?

MARCORLOGCOM obligated \$5,222,563,737.14 since FY 2007. Twenty-eight percent of that money was allocated towards product service code (PSC) R706, Logistics Support Services. The next highest PSC was J099, Maintenance; Repair of Miscellaneous Equipment, with 10% of the obligation. The third most utilized PSC was R408, Program Management/Support Services. The command obligated 6% of its total spend on this PSC. Just one contractor owns 99% of the contracts awarded under PSC J099, while five contractors were awarded 76% of the contracts under PSC R706.



ACQUISITION RESEARCH PROGRAM DEPARTMENT OF DEFENSE MANAGEMENT NAVAL POSTGRADUATE SCHOOL From FY 2007 to FY 2022, MARCORLOGCOM issued 28,782 awards to 2,688 contractors, with 60% of the spend obligated to just 10 contractors. The top three contractors in terms of total spend are Honeywell International Inc. (16% of total spend), Raytheon Company (15% of total spend), and KBR Inc. (8% of total spend). Following the acquisition of a Honeywell International Inc. subsidiary, KRB now owns all the MARCORLOGCOM contracts awarded to Honeywell International. The top three contractors, in terms of total actions are Oshkosh Corporation (7% of total awards), Raytheon Company (4% of total awards), and Honeywell International Inc. (4% of total awards).

2. How Can Category Management Be Implemented, or Further Implemented, within MARCORLOGCOM to Improve the Spend Efficiency of the Command's Contracting Strategy?

Based on our findings from our research, we made three recommendations for how MARCORLOGCOM can further implement CM within its contracting strategy. Our first recommendation was to use multiple award indefinite delivery contracts (IDCs) rather than single award IDCs to allow for a larger contractor pool and to increase efficiency and price of contract awards through added competition. Our second recommendation was to expand the use of IDCs. Thirty-one percent of the contracts that MARCORLOGCOM awarded, many of which were small dollar and routine, were not awarded in reference to an IDC. We recommend limiting the use of purchase orders (POs) and definitive contract actions (DCAs) and maximizing the use of delivery orders (DOs) awarded in reference to IDCs in order to decrease the administrative burden and increase the efficiency of the contracting process. Our third and final recommendation was to increase the communication, coordination, and organization between the contracting units within MARCORLOGCOM. We feel that in order for MARCORLOGCOM to further implement CM within its command, all of its contracting personnel must work together to award, communicate, and utilize IDCs for commonly purchased requirements to the maximum extent practicable.



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C. AREAS FOR FURTHER RESEARCH

After completing our research, we identified four areas of further research that could be explored.

First, our research focused exclusively on the Marine Corps. We did not research or analyze contracting data from any other branches of service such as the Army, Navy, Air Force, Coast Guard or Space Force. Further research could explore contracting data from other branches of service to determine the extent that CM has been implemented, and how it can be further implemented.

Second, our research focused exclusively on the Logistics Command within the Marine Corps. We did not analyze the contracting data from any other commands within the Marine Corps such as the Maintenance Command or Systems Command. Further research could explore contracting data from other commands within the Marine Corps to determine the extent that CM has been implemented, and how it can be further implemented. Furthermore, this additional research could perhaps identify opportunities for the various commands to work together to implement CM.

Third, our research focused exclusively on MARCORLOGCOM's contracting data from FY 2007 to FY 2022. We did not analyze any contracts that were awarded prior to FY 2007. For this reason, our research was limited in scope. Further research could analyze MARCORLOGCOM's contracting data from a greater period of time to identify more long-standing trends.

Fourth, our research identified 745 unique PSCs that were being procured using individual POs and DCAs. Although MARCORLOGCOM spent very little money on any of these PSCs individually, when they are all added together, their total value is more substantial. For our research, we chose to focus on the PSCs that MARCORLOGCOM spent the most money on, not the least. For this reason, our research does not contain any information on how these PSCs can be better procured. Further research could explore these less utilized PSCs to determine if there are any opportunities to implement CM to decrease the administrative burden of the contracting process for these PSCs. An example would be to determine ways to group many of these PSCs together and establish IDCs for



Acquisition Research Program department of Defense Management Naval Postgraduate School the grouping in order to alleviate the need to award POs and DCAs for so many individual PSCs.



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