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Potential for E-Commerce Online Marketplace Procurement Efficiencies in USMC Aviation Logistics

June 2024

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Prepared for the Naval Postgraduate School, Monterey, CA 93943.

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ABSTRACT

This thesis examines the potential of e-commerce platforms to improve procurement efficiencies within USMC aviation logistics (AVLOG) in response to the modernization initiatives prescribed by the 2022 National Defense Strategy. It specifically explores the General Services Administration (GSA) Commercial Platforms Program (CPP) in collaboration with Amazon Business and determines how the government purchase card (GPC) can be leveraged to streamline procurement. Through qualitative research methodologies, including gap analysis and Task-Technology Fit (TTF) model application, the study aims to provide a comprehensive assessment comparing the current AVLOG acquisition process with the proposed e-commerce methods. The findings are intended to guide senior acquisition leaders in the AVLOG community by identifying potential benefits and barriers, including self-imposed limitations, associated with adopting e-commerce solutions for procuring non-aeronautical consumables. The study concludes that while the benefits of e-commerce adoption in military procurement are evidently aligned with strategic directives, empirical testing within the AVLOG community is essential for validating these findings and initiating necessary policy reforms.



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LIST OF ACRONYMS AND ABBREVIATIONS

ACE	Aviation Combat Element
ADA	Anti-Deficiency Act
AO	Approving Official
A/OPC	Agency/Organization Program Coordinator
APC	Agency Program Coordinator
ARP	Acquisition Research Program
ASD	Aviation Supply Department
ASDTP	Aviation Supply Desktop Procedures
ATEP	Amazon Tax Exemption Program
ASO	Aviation Supply Officer
AVLOG	Aviation Logistics
B2B	Business to Business
B2C	Business to Customer
B2G	Business to Government
CAS	Customer Assistance Section
CH	Card Holder
CO	Certifying Officer
CPG	Commandant's Planning Guidance
CPP	Commercial Platforms Program
DOD	Department of Defense
DON	Department of the Navy
DP&C	Defense Pricing and Contracting
DPG	Defense Planning Guidance
FAR	Federal Acquisition Regulation
FAS	Federal Acquisition Service
FASA	Federal Acquisition Streamlining Act
FSS	Federal Supply Schedule
FY	Fiscal Year
GAO	Government Accountability Office
GCPC	Government-wide Commercial Purchase Card



GPC	Government Purchase Card
GSA	General Services Administration
HA	Head of Activity
HQMC	Headquarter Marine Corps
I&L	Installations and Logistics
IT	Information Technology
MAGTF	Marine Air Ground Task Force
MALS	Marine Aviation Logistics Squadron
MCI	Marine Corps Installations
NDAA	National Defense Authorization Act
NDS	National Defense Strategy
NIB	National Industries for the Blind
NSN	National Stock Number
OMB	Office of Management and Budget
OMD	Operations Management Division
OUSD A&S	Office of Undersecretary of Defense, Acquisitions & Sustainment
TTF	Task-Technology Fit
USMC	United States Marine Corps
USN	United States Navy
WAWF	Wide Area Work-Flow
3WM	3-Way Match



I. INTRODUCTION

A. BACKGROUND

The research presented in this thesis was inspired by Topic T20-029 of the 2023 NPS Acquisition Research Program (ARP). The summary of the topic provides an outline for how online marketplaces have dramatically changed the way consumers buy goods and services. However, it seems that the Department of Defense (DOD) and the wider federal government are behind when it comes to updating buying methods to take full advantage of what these platforms offer (Acquisition Research Program [ARP], 2023). This study looks into how e-commerce sites, including the General Services Administration (GSA) and Amazon Business, could potentially make the procurement processes of the U.S. Marine Corps' aviation units more efficient.

Due to the provisions in United States Title 10, Armed Forces and joint doctrine, the Marine Corps has integrated logistical self-sufficiency as a crucial component of Marine Air Ground Task Force (MAGTF) expeditionary combat capabilities (United States Marine Corps [USMC], 2000). As such, the aviation logistics (AVLOG) community's mission is centered on producing aviation combat elements (ACE) that are quickly deployable, self-sufficient, sustainable, and adaptable. Supporting the ACE logistically is more intricate compared to other MAGTF elements, as it is funded and sourced by both the Navy and the Marine Corps, creating additional challenges in meeting this mission. The Marine Aviation Logistics Squadron (MALS) plays a central role in the AVLOG framework, holding responsibilities such as rapid identification, marshaling, and deployment of necessary aviation logistics elements. While efforts within the MALS are ongoing to boost effectiveness and readiness on the flight line, widespread adoption of such innovations has been slower to materialize, and Marine Corps publication updates that align to DOD policies have lagged.

Currently, the Marine Corps' mandated supply and fiscal procurement spending tools pose an expeditionary concern to operational units, especially for the Marine AVLOG community, due to how the current processes to procure mission essential supplies and



materials run the risk of long lead times, shipping feasibility, and increased prices. Recognizing and conforming to newer DOD policies could effectively mitigate these issues. For instance, a recent congressional decree, the Fiscal Year (FY) 2018 National Defense Authorization Act (NDAA), included Section 846 which directed the General Services Administration (GSA) and the Office of Management and Budget (OMB) to establish a program for procuring goods through commercial e-commerce platforms. The goal of this program is for “enhancing competition, expediting procurement, enabling market research, and ensuring reasonable pricing of commercial products” (National Defense Authorization Act [NDAA], 2017, p. 201). GSA complied and established the GSA Commercial Platforms Program (CPP) which enabled government agencies the ability to use their Government Commercial Purchase Cards (GCPC) through online marketplaces with the goals of modernizing the commercial product buying experience, streamlining the mission-oriented purchasing of commercial items, and analyzing the commercial market spending trends and data points to enable better buying decisions for further procurement (General Services Administration [GSA], 2022). The three awarded online platforms identified to support the 2018 NDAA Section 846 initiative were Amazon Business, Fisher Scientific, and Overstock Government (Mak, 2023). After three years of positive results, GSA CPP expanded their awarded platforms portfolio to include e-Procurement Services, Grainger, Noble Supply & Logistics, Pacific Ink, Social Glass, and Staples (GSA, 2024a).

The original intent of this thesis was to provide quantitative data to assess the potential efficiencies that e-commerce platforms, such as Amazon Business, could provide. Still, the systems and policies currently existing within the USMC aviation logistics (AVLOG) community are not ready for that. Thus, the researchers were forced to pivot and instead explore the reasons behind why there is USMC hesitation to adopt widely used and trusted platforms in regular civilian lives, as well as those supposedly approved for use by the DOD Defense Pricing and Contracting (DP&C).



B. PROBLEM STATEMENT

On December 8, 2022, the DOD issued a memorandum (GPC 2023–01) revising the policy on third-party payments for the GCPC to include the use of e-commerce platforms for micro-purchases (Office of the Undersecretary of Defense Acquisition and Sustainment [OUSD A&S], 2022). This directive permitted government agencies to procure products via the GSA’s CPP and other approved e-commerce sites such as Amazon Business, FisherSci.com, and OverstockGovernment.com, provided they had authorization from DP&C. Subsequently, on August 9, 2023, the DOD further amended the policy (GPC 2023–04), removing the prerequisite for DP&C approval before engaging with the GSA CPP (OUSD A&S, 2023). Despite these policy enhancements, the USMC continues to face challenges in adopting and leveraging e-commerce, particularly within the Aviation Logistics (AVLOG) community.

MALS are in dire need of greater supply chain agility and efficiency. However, the supply departments encounter significant obstacles when attempting to spend their allocated funds in the way that the memorandums allow. Unit leaders have even been warned that their Government Purchase Cards will be deactivated if they attempt to transact on Amazon Business or any other e-commerce platforms that have been explicitly sanctioned in the aforementioned memorandums. This ongoing restriction hampers the aviation community supply chain and undermines the operational effectiveness of flight line activities, especially when traditional procurement methods fail to meet the pressing demands of AVLOG operations.

C. PURPOSE STATEMENT

This research aims to fill the knowledge gap surrounding the “Amazon Amendment” of the FY2018 National Defense Authorization Act. The primary research approach involves utilizing qualitative research methods, specifically by conducting a gap analysis that compares the current processes with the utilization of GSA CPP and Amazon Business. The aim is to determine the potential benefits of both GSA CPP and Amazon Business to the MALS and their customers.



D. RESEARCH QUESTIONS

The researchers investigation is designed to answer the following questions:

1. How can the USMC AVLOG community best exploit the use of e-commerce platforms to procure non-aeronautical consumables?
2. Are there self-imposed restrictions that prevent the AVLOG community from using e-commerce?
3. Are there other efficiencies to be realized through the use of e-commerce platforms?

E. RESEARCH BENEFITS AND LIMITATIONS

This research enables the identification of specific advantages and insights on how e-commerce platforms support and enhance procurement operations within the DOD. Moreover, this research allows for the exploration of currently available but underutilized e-commerce platforms which provides competitive pricing options and streamlined purchasing processes. Further analysis reveals potential efficiency improvements by examining various factors like product selection, enhanced account management, tracking and reporting capabilities, integration with procurement systems, the benefits of an Amazon Business membership, and the benefits setting up buyer accounts through GSA CPP. Overall, this research allows for informed decisions that maximize the advantages of e-commerce platforms, optimizing procurement processes, and potentially achieving cost savings and efficiency improvements within the DOD.

This research encountered certain limitations. Constraints related to time within an academic framework, alongside policy restrictions, necessitated that the scope of the research had to be confined to a gap analysis. Although the findings presented in this report are theoretical, the researchers are confident that they can be applied broadly to operational fleets. Additionally, while recognizing the significance of supply chain management and legal considerations, these topics exceed the breadth of this research report and will not be covered.



F. ORGANIZATION OF THE REPORT

The rest of the thesis structure is as follows: Chapter II of the thesis offers a comprehensive literature review, providing a foundation for understanding the current state and historical context of procurement processes within the USMC and the role of e-commerce platforms. It examines the histories of GSA and Amazon Business, the GPC program, and the USMC's procurement strategies. The chapter then discusses how the USMC can enhance procurement efficiency through e-commerce platforms and addresses the GAO's advocacy for leveraging GPC buying power. Chapter II then concludes with noting the USMC goal to enhance agility and lethality, recognizing the pivotal role the AVLOG community has in realizing these aspirations. Chapter III describes the methodology used to conduct this research, Chapter IV provides the analysis and results of the study, Chapter V brings forward the findings, answers the research questions and a discussion for them. Chapter VI presents the researchers' recommendations, conclusions, and provides areas for future research.

G. SUMMARY

This chapter established the foundation for the research, commencing with an examination of the AVLOG purchasing processes and a concise review of the prevailing e-commerce policies. Subsequently, the researchers addressed the purchasing process challenges, the research objectives, and the guiding research inquiries. The chapter concluded with an emphasis on the discerned advantages and constraints inherent in the researchers study, along with an outline of the subsequent sections of the report. Transitioning to the following chapter, an extensive examination of the literature pertaining to the AVLOG community's procedures and the GPC program will be conducted. This will encompass additional crucial details about e-commerce platforms, insights from GAO reports, and the prevailing policies, procedures, and regulations linked to the GPC program.



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II. LITERATURE REVIEW

A. INTRODUCTION

This chapter reviews literature the authors studied to better understand the GSA CPP, e-commerce platforms, the GPC program, and the USMC purchasing processes. The authors begin with an overview of MALS' operations when purchasing non-standard items. Next, the literature review offers an overview of GSA CPP and its implementation in the DOD. Then, the authors provide a brief historical overview of GSA and Amazon Business platforms. Next, this review details the DOD's GPC historical policies and implementation processes. Lastly, the authors discuss the Amazon Amendment introduced in the FY2018 NDAA and the USMC Aviation unit's strategic management of the GPC.

B. MARINE AVIATION LOGISTICS SQUADRONS

Presently, the USMC AVLOG community operations are governed by NAVMC 4400.177A Marine Corps Aviation Supply Desktop Procedures (ASDTP), which was last updated in April 2022. Under these procedures, the Operations Management Division (OMD) is tasked with "internal and external expediting, reconciliation, and monitoring customer requirements" (Department of the Navy [DON], 2022, p. 3–1). Under OMD is the Customer Assistance Section (CAS). CAS is responsible for receiving, processing, and monitoring the purchasing of all non-aeronautical related material (Figure 1). To purchase non-National Stock Number (NSN) items, CAS requires the customer to submit an open purchase request package. The process of submitting the package involves a Marine Corps Installations (MCI) form, a justification letter, a mandatory source of supply screening with a copy of the results, quotes for items that are unavailable, and then applicable references and or related publications to prove that the request is a valid requirement (Department of the Navy [DON], 2022, Appendix T). Once that package gets submitted to CAS, a fiscal clerk validates the package first, then the Aviation Supply Officer approves the purchase, which is then followed by the responsible/certifying officer (CO) conducting the final approval. Once the package is processed, it takes an average of three weeks for the purchase to complete, as the Aviation Supply Department must ensure they do not over-obligate



funds while working through a long list of requirements. When considering this process, it becomes apparent that efficiencies can be achieved in numerous ways. While some may be beyond this thesis's scope, one is the underutilization of e-commerce platforms.

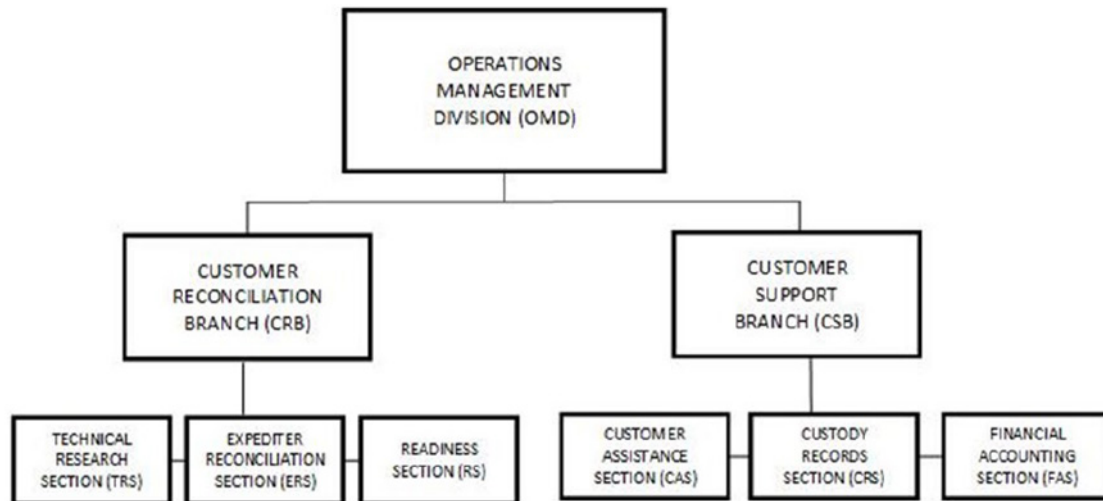


Figure 1. OMD Org Chart. Source: DON (2022, p. 3–1)

C. GSA COMMERCIAL PLATFORM PROGRAM

The commercial sector has long recognized the advantages of adopting various e-commerce platforms for their procurement requirements, seeing tangible results compared to the dated and paper-driven processes. The federal government has been slow to adopt the same approach due to the various legal and federal restrictions. Recently, senior leadership has recognized the potential for tangible results to streamline the government procurement process if a program could be successfully implemented. Therefore, the FY2018 NDAA mandated GSA and the OMB to create and execute a program that allows agencies to purchase products from a variety of online vendors. This initiative aimed to stimulate competition and streamline the purchasing process for specific commercial products, among other objectives (Mak, 2023). To start, GSA launched market research for the CPP and published multiple pertinent findings. First, they found that the amount of federal spending taking place via e-commerce nearly doubled between FY14 and FY18 (GSA, 2019). Micro-purchases were recognized as a significant portion of the spending

that agencies considered vital for acquiring mission-critical resources. These purchases were identified as essential buying tools, maximizing flexibility, and minimizing administrative costs. Second, they also validated interest in increasing visibility to open market spending and management of the spending through e-commerce platforms (GSA, 2019). Lastly, they noted that the potential benefits of micro-purchase spending could be significantly amplified if integrated with technological advancements and sophisticated data analytics through contemporary purchasing platforms. E-commerce platforms are now able to bring marketplace dynamics to a cardholder (CH) in ways unforeseen before when Congress initially granted the authority in the Federal Acquisition Streamlining Act (FASA) of 1994 (GSA, 2019). With these findings in mind, GSA conducted testing and analysis from August 2020 to August 2021.

In 2022, GSA released the results of their testing and analysis. They noted that in June of 2020, contracts were awarded to Amazon Business, Fisher Scientific, and Overstock Government. After a year of testing, GSA observed CH participation increase from 350 to 45,000 and total sales reaching \$11.7 million (GSA, 2022). There was also a customer satisfaction score of 9/10, with 92 percent of customers confirming time savings and 90 percent confirming pricing competitiveness related to the CPP (GSA, 2022). To reinforce the need for the CPP, it was noted that the COVID-19 pandemic significantly accelerated the evolution of capabilities and requirements in the e-commerce domain and that customers now expect these advanced features within their workplaces as they have become accustomed to the benefits in their personal lives. The study concludes that the partnership between the GSA CPP and its (now eight) awarded platforms allows agencies to take advantage of the best of both worlds. Agencies can access the vast selection and convenience of each participating platform while still benefiting from standardized terms and conditions and access to mandatory source programs, including AbilityOne, through the GSA program. To use the GSA CPP, agencies partner with GSA to establish buyer accounts, in alignment with an agency's GPC program office, on each awarded platform. Buyers are then able to search and purchase products on participating platforms while meeting government-wide and agency-specific compliance requirements, including small



business credit for purchases made with SAM-certified small businesses. (GSA, 2022; S. Johnson, personal communication, April 22, 2024).

With the recent success of the program, GSA CPP recently expanded their platforms awardees portfolio to include the following: “Amazon Business, e-Procurement Services, Fisher Scientific, Grainger, Noble Supply & Logistics, Pacific Ink, Social Glass, and Staples” (GSA, 2024a). As the GSA CPP continues to achieve its goals in modernizing and streamlining the procurement of commercial items, the federal government can begin to increase their pace for procurement to meet their operational needs, similarly to how the commercial sector has been able to receive the benefits and results from utilizing the e-commerce domain.

D. GSA AND AMAZON BUSINESS

Over the last few years, e-commerce sales have outweighed brick-and-mortar retail, creating something called business-to-customer (B2C) e-commerce. B2C refers to the “Internet transactions of goods and services between a business and a private consumer” (Statista, 2023). As the adoption of e-commerce for personal use increased, so did the desire to gain the same efficiencies in the business realm. This adoption allowed for the introduction of business-to-business (B2B) e-commerce and later, business-to-government (B2G) e-commerce. Because this study aims to compare the use of GSA Advantage and Amazon Business within the context of United States Marines Corps (USMC) AVLOG, the researchers provide a historical context and background of each organization and its e-commerce platforms.

1. GSA and GSA Advantage

GSA and GSA Advantage are essential components of U.S. government procurement, each serving distinct purposes. As a federal agency, GSA manages government infrastructure, supplies, and transportation and oversees procurement for government agencies, negotiating contracts with vendors to streamline the purchasing process and achieve cost savings (GSA, 2023). On the other hand, GSA Advantage operates as an online platform, connecting government entities with thousands of contractors and a vast array of supplies and services available through GSA contracts,



thereby facilitating efficient and compliant procurement processes in line with negotiated pricing.

a. GSA

Originally established in 1949, President Harry Truman started an initiative to consolidate multiple agencies into a single department “to streamline the administrative work of the federal government” (GSA, 2023a). Now merged under the umbrella of GSA, these agencies were originally called the “National Archives Establishment, the Federal Works Agency, the Public Buildings Administration, the Bureau of Federal Supply, the Office of Contract Settlement, and the War Assets Administration” (GSA, 2023a). With the consolidation complete, this united agency was tasked to conduct the administrative work for providing supplies and workplaces for federal employees (GSA, 2023a). In 1949, the original mission of GSA was the “disposal of war surplus goods, manage and store government records, handle emergency preparedness, and stockpile strategic supplies for wartime” (GSA, 2023a). During this period for the government, the U.S. was still dealing with the aftermath of World War II. With over seven decades past its inception, the new mission has become “to deliver the best customer experience and value in real estate, acquisition, and technology services to the government and the American people” (GSA, 2023a).

b. GSA Advantage

The GSA introduced GSA Advantage in October 1995, with the vision of creating an platform for organizations to procure stock from their warehouses using a GPC (Woods, 2003). Purchasing through GSA Advantage was limited to stock items, until February 1996 when Congress passed the Clinger-Cohen Act, mandating the development of a system that could offer government-wide, online access to “information on all Federal Supply Schedule (FSS) products and services” (Woods, 2003). GSA determined that Advantage was the only system capable of meeting the act’s requirements and as a result, invested \$84 million into transitioning from a warehouse ordering system to an e-commerce platform (Woods, 2003). However, by 2001, GSA mandated wider participation after only 35 percent of vendors willingly participated in the program (Woods, 2003). Despite the



obligatory vendor participation policy of the GSA, not every vendor listed their products and services on the GSA Advantage platform (Woods, 2003). The report highlighted multiple factors contributing to their non-engagement; these encompassed the customer's restrained use of the platform, the substantial expenses related to data entry into the system, as well as the inadequate descriptions that challenge the customers' capacity to make knowledgeable purchasing choices (Woods, 2003).

With the history of GSA Advantage in mind, Canter et al. (2018) sought to find out if government entities benefitted from directing more of their purchases to GSA Advantage. Overall, they found that 80 percent of the time, items were better priced on GSA Advantage than on Amazon Business, yet minimum order prices deterred customers from choosing GSA Advantage over Amazon Business (Canter et al., 2018). They also found that Amazon Business had longer shipping times that had to be paid for, whereas GSA Advantage offered free shipping and was 60 percent faster (Canter et al., 2018).

2. *Amazon and Amazon Business*

The e-commerce industry experienced a significant shift after Amazon's emergence. This international giant has reshaped the landscape of online retail and shopping services, establishing itself as a dominant force in the general marketplace business model. The growing sales numbers are a testament to its success, as Amazon reached nearly \$514 billion in net sales revenue worldwide in 2022, solidifying its position as one of the most valuable brands globally (Statista, 2023). Given its success in the civilian sector, one might wonder if it could achieve similar success in the military sector.

a. *Amazon*

Amazon.com Inc, or Amazon, began as an online bookstore in 1994 and has since become a retail giant, offering over 353 million products and services worldwide (Anthony, 2023). As of July 2023, Amazon ranked first among the top 10 e-commerce companies worldwide, with a market value of over \$1 trillion (Statista, 2023). The essence of Amazon as a company is succinctly encapsulated by its vision statement and guiding principles:



Amazon is guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking. Amazon strives to be:

Earth's most customer-centric company, Earth's best employer, and Earth's safest place to work. (Amazon Business, n.d.h)

Although Amazon initially gained recognition as a bookseller, Jeff Bezos maintained from its inception that it was never launched to be a simple consumer goods retailer (Hall, 2023). Instead, Bezos insists that Amazon was and still is a trailblazing technology company, primarily focused on streamlining online transactions, making online shopping easier for consumers (Hall, 2023). Despite skepticism, Amazon grew fast, reaching 180,000 customer accounts by December 1996 (Hall, 2023). By the early 2000s and through the present day, Amazon has continued on the fast track to dominating the e-commerce world by pushing for innovations such as Amazon Web Services, 1-Click shopping, Amazon Prime, Fulfillment by Amazon, and more (Amazon Business, n.d.h).

b. Amazon Business

Twenty-one years after launching Amazon, the company noted a large portion of its customer base was other businesses and organizations, which motivated them to launch Amazon Business, their B2B marketplace (Kellner, 2023). Amazon Business has since become one of the fastest growing ventures with marketplaces established for all types of customers, government agencies included, reaching \$35 billion in annualized sales in FY23 (Kellner, 2023).

The difference between Amazon and Amazon Business is that Amazon Business is a B2B e-commerce platform where businesses and organizations can purchase a wide range of products such as office supplies, industrial equipment, electronics, food and beverages, healthcare supplies, and more. So, instead of physically going into stores such as Office Max or Staples, Amazon has given businesses the option to purchase everything they need online and have it delivered to their door. In signing up for an Amazon Business account, business owners reap additional benefits that regular Amazon customers do not have access to, such as pricing and quantity discounts, business-only product selection, enhanced data analytics, tax exemptions, dedicated customer support, as well as Business Prime, which



now includes free two-day shipping (Amazon Business, n.d.h). Additionally, the Amazon Business platform provides features like data analytics, approval workflow, and comprehensive management tools for buyers, deliveries, and compliance. These features enable businesses and organizations to gain insights from their procurement data, streamline approval processes, and effectively manage various aspects of procurement operations. By leveraging these capabilities, businesses are able to make informed decisions, improve efficiency in their procurement processes, and ensure compliance with regulations and policies. The B2G side of the platform allows for this, and more.

The B2G side of Amazon Business offers a combination of selection, convenience, and value, along with exclusive benefits specifically tailored for government purchases, such as establishing storefronts for the mandatory sources of supply like AbilityOne (Amazon Business, n.d.h). The compliance features within the platform also block covered telecommunications equipment and other restricted items or storefronts, which is a safety mechanism that the GSA CPP also offers. This feature, and others, have proven to be useful to a variety of government agencies, including the United States Air Force, where they use the analytic tools available through Amazon Business to provide more transparency into purchase card spending more than ever before (Canter et al., 2018). Guaranteeing transparency is particularly crucial in adhering to the regulations of the GPC program which highlights the potential advantages of employing e-commerce platforms.

E. GOVERNMENT-WIDE COMMERCIAL PURCHASING CARD PROGRAM

1. GPC Background

To further understand how e-commerce can successfully become integrated with the government procurement process, there must be an examination of the mechanics for the spending tool. Since the GPC has been selected as the preferred method of procurement at or below the micro-purchase threshold, understanding its history, hierarchy, and purpose will provide clarity on how to realize the speed and efficiency it provides in procurement (Federal Acquisition Regulation [FAR] 13.2, 2023). Before the GPC, garrison and operational acquisitions were constrained to the laborious and time-intensive process of



conducting manual purchase orders. After recognition of the constraints being placed upon the government, key leaders took action to initiate reform. As a result, these key leaders created the GPC program, which began with the 1982 Executive Order 12352, titled “Procurement Reform,” which was crafted to institute a system within each agency to oversee procurement, streamline the procurement process, cultivate a skilled workforce, and enhance the utilization of competition (GAO, 1983). The DOD required a new way to conduct purchase orders, ensuring there were appropriate internal controls in place and establishing quick and efficient procurement methods to meet the pace of DOD requirements. After assessing various competitors, GSA issued a multiple award contract under their GSA SmartPay Program to provide the government with a purchase card system and various associated services (DON, 2015). The GSA SmartPay Program administers its purchase card contracts with three banks: U.S. Bank, Citibank, and JP Morgan Chase, which include usage requirements of travel, fleet, purchase, and integrated cards (Mak, 2016). Through the use of this program, the streamlining and modernization of the paper-driven acquisition process realized \$1.7 billion in annual administrative costs, which was proof that the modern GPC program provided real benefit to the government procurement process (Mak, 2016).

2. GPC Purpose, Micro-Purchase Threshold, Historical Use, Policy, and Hierarchy

a. GPC Purpose

The primary purpose of the GPC is to streamline small purchase methods and payment processes, reduce paperwork, eliminate cash management, and restructure managerial tasks related to both conventional and evolving procurements of supplies and services (DON, 2015). GPC enabled users to use their charge cards to purchase both in person and electronically, through online services. Prior to 1994, the purchasing cards were only used by procurement offices and authorized personnel. However, the FASA of 1994 expanded the GPC authority to authorized government CH’s, increasing the operational reach for procurement requirements (Mak, 2016, p. 4). FASA enabled users to make purchases under the micro-purchase threshold while ensuring CH’s were conducting a



responsible collection of competitive quotes from multiple vendors and also mandated that CH's must allocate purchases fairly among the approved suppliers (Mak, 2016, p. 4).

b. GPC Micro-Purpose Threshold

Mentioned earlier, the use of GPC is “the preferred method for procurement at or below the micro-purchase threshold” (FAR 13.2, 2023). Only authorized CH's, who must comply with the legal, contractual, and organizational obligations, may use the GPC to purchase supplies and services per their delegated written authority (DON, 2015). Prior to FY17, the DOD followed the micro-purchase threshold guidance of \$3,500 for supplies, \$2,500 for services, and \$2,000 for construction (DON, 2015). However, changes to the NDAA of FY17 and FY18 (Federal Registrar, 2020) ruled that the micro-purchase thresholds for supplies would be increased to \$10,000 for the DOD, while maintaining \$2,500 for services, and \$2,000 for construction (OUSD A&S, 2018).

c. GPC Historical Use

Over the years, the GPC program has seen success with its utilization for conducting micro-purchases at or below the threshold through the increase in transactions across government agencies and the increase in dollar value for goods and services. From FY10–FY15, CH's from government agencies spent a range of approximately \$17 billion to \$19.5 billion annually in goods and services in support of their daily operations over a five-year period (Mak, 2016). In comparison to the next six years following, from FY15–FY21, the DOD conducted 33,176,581 total purchase card transactions, which constituted just over \$36 billion in support of goods, supplies, and services (Reich, 2022). Additionally, through the use of the GSA SmartPay GPC program, the use of purchase cards has yielded positive results regarding refunds, recuperating \$3 billion in reimbursements since its inception in 1998 (Mak, 2016).

d. GPC Policy

As with any procurement and financial management process, there is always high visibility due to the use of government-appropriated funds. Through this visibility, policy enforcement is always required, to ensure proper mitigation of fraudulent use and to ensure



internal control measures are in place. In 2012, Congress passed the Government Charge Card Abuse Prevention Act, in response to a 2008 GAO report, highlighting the need to “strengthen internal controls and financial and fraud risk management” in the GPC program (Larin, 2017, p. 16). Furthermore, the GAO recommended that the DOD establish further internal controls in order to prevent and deter potential GPC misuse, abuse, and fraud (DON, 2015). The outcome led to the establishment of the DOD Charge Card Guidebook (Department of Defense [DOD], 2017) and DON Government-Wide Commercial Card Program Policy NAVSUPINST 4200.99C (DON, 2015), to ensure clear guidance and direction were being provided to the wider DOD and DON community. This emphasizes that in addition to the regulations and policies established by OMB, agencies are tasked with monitoring the actions of their cardholders (CHs) as well as implementing their own policies and procedures to govern the utilization and implementation of GPC (Larin, 2017).

e. GPC Hierarchy

Individual agencies are responsible for establishing their own hierarchies in the purchase card procurement chain, to enable monitoring, approval, and oversight of the purchases being made. At the ground level, the GPC CH’s are directly responsible for the ethical use of the purchase card. In compliance with statutory, contractual, administrative, and locally applicable requirements, CH’s are responsible for procuring goods, supplies, and services, ensuring the availability of funds, procuring through authorized sources and vendors, maintaining logs, and retaining receipts (DON, 2015). They conduct the majority of the hands-on oversight and transactions for their respective card procurement authority.

Next in the GPC structure is the Approving Official (AO). The AOs are the CH’s direct supervisors. They ensure that the CH’s purchases are necessary for accomplishing the agency’s operational mission and to conduct reviews and final approvals of all transactions, once they are reconciled with the CH (Larin, 2017). The AO is the first line of defense against minimizing the misuse and abuse of fraudulent GPC usage (DON, 2015). AOs are also eligible to fulfill the role of Certifying Officer (CO). These personnel must be individually appointed and trained in the roles of the CO, to certify GPC invoices for



payment and reconciliation (DON, 2015). COs validate transactions for legal standing prior to certification, verify accurate supporting documentation retention, and ensure CH's have reconciled all transactions in their purchase log entries (DON, 2015).

The last primary official within the GPC's direct hierarchy is known as the Agency/ Organization Program Coordinator (A/OPC). There are three A/OPC levels for this respective role however, the last primary official depends on the command level in which they are posted and are responsible for managing (DON, 2015). Their primary role is to manage the GPC program on behalf of the Head of Activity (HA), at their respective command level. Additionally, they ensure all personnel are appointed in writing, oversee and track training, conduct compliance reviews, and provide oversight towards the integrity and performance of the GPC program they are responsible for (DOD, 2017).

F. USMC COMMANDANT'S PLANNING GUIDANCE

General Berger's intent, as outlined in the Commandant's Planning Guidance (CPG), emphasizes the need for significant change within the Marine Corps to align with the National Defense Strategy (NDS) and Defense Planning Guidance (DPG). During a testimony regarding the USMC's posture before the Senate Appropriations Committee, he explicitly stated,

The magnitude of change required to prepare the Marine Corps installations and logistics enterprise to support the future force mandates a fundamental reevaluation of our approach to logistics. (Commandant of the Marine Corps, 2023)

Leveraging e-commerce within the aviation logistics community presents an opportunity to do this. As the CPG states, the USMC needs to eliminate outdated policies, doctrines, organizations, and force development strategies that may no longer be effective or relevant in the rapidly evolving future operating environment (CPG, 2019). One place to start making changes is in the logistics systems such as those that are in the AVLOG community because, as Marine Corps Doctrinal Publication 4 states, "logistics can be a decisive function of warfare" (USMC, 2023, p. 1–3).

To align with the NDS and DPG, the USMC must prioritize a future force that is agile, responsive, and resilient (DOD, 2022a). This necessitates seeking opportunities to



adopt trusted commercial technologies (DOD, 2022b). Since the publication of Force Design 2030, the USMC has attempted to enhance its operational effectiveness and responsiveness in the logistics realm through the adoption of commercial technologies such as the Expeditionary Fabrication Laboratory and Additive Manufacturing. However, it has lacked in bringing policies up to date. Now, the AVLOG community must use Force Design 2030 to align operations and policies with the best commercial practices. In doing so, leaders can increase the likelihood of effective technology adoption while establishing organizational policies and procedures to support future mission accomplishment.

G. SUMMARY

In summary, this chapter provided a detailed explanation for key components related to the problem space of this thesis. The relevant topics included MALS, GSA CPP, GSA Advantage, Amazon Business, the GPC program, and the USMC CPG. First, covering MALS operations, specific highlights were brought forward regarding the complexities involved with the purchase of non-standard items and how there is a growing need to improve procurement efficiencies. Next, the chapter jumps into the value gained by the DOD through the implementation of GSA CPP, emphasizing its role in modernizing procurement processes. Moving into the e-commerce realm, there was a detailed overview provided regarding GSA Advantage and Amazon Business. This is where their backgrounds, histories, and current practices were highlighted, showing their roles in government procurement and their growth trajectories in the e-commerce sector. Next, there was the review regarding the GPC program to provide context regarding the background, purpose, micro-purchase thresholds, approval hierarchy, policy enforcement, and historical use. Lastly, there was an analysis for the USMC CPG, highlighting the importance for the Marine Corps to adapt to the ever-changing operational environment by leveraging the available commercial technologies and updating organizational policies and procedures, in order to be postured to meet the mission.



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III. METHODOLOGY

A. INTRODUCTION

As previously mentioned, the original intent of this thesis was to provide quantitative data to assess the potential efficiencies that e-commerce platforms such as the CPP could provide. However, the systems and policies currently existing within the USMC AVLOG community are not ready for that. Thus, the thesis research instead explores the reasons behind the USMC's hesitation to adopt platforms that are widely used and trusted in regular civilian life, that are also approved for use by the DOD DP&C. The adjusted purpose of this thesis is to provide a look into whether the USMC should adopt DOD policies regarding the use of e-commerce to better support the warfighter. The decision-making process entails two pivotal phases, with the initial phase involving a comprehensive gap analysis. Once the identified gaps have been defined, the subsequent critical process entails the completion of a Task-Technology Fit (TTF) analysis.

B. STAKEHOLDER INPUTS

In order to gain an understanding of the existing procurement capabilities, it is crucial for relevant stakeholders to define the specific needs and challenges that influence their operations. This necessitates obtaining input from a range of stakeholders, including USMC representatives, DOD partners, and industry sources. To achieve this, brief interviews were conducted with these key stakeholders to gather insights, perspectives, and firsthand experiences related to procurement practices and challenges. This collaborative approach aims to ensure that the procurement analysis is comprehensive and well-informed, incorporating diverse viewpoints and real-world considerations from the involved stakeholders. These interviews were strictly conducted to enhance the authors' understanding of Amazon's business operations in support of government procurement, GSA CPP contribution to the government procurement process under the new guidelines set by the FY18 NDAA, and HQMC I&L operations, and the current position of the application of FY18 NDAA policy at the Marine Corps level. Each interview was one hour,



addressing the questions annotated in Appendix A-C. Notes were taken by the authors and used to draw conclusions in the analysis of this topic.

C. GAP ANALYSIS APPROACH

The operational need for exploring the use of e-commerce has been defined in the literature review through the CPG, NDS, and DPG. This has allowed the researchers to understand mission performance expectations and compare them to existing capabilities inside and outside the USMC to determine where barriers exist. Gap analysis was used as a strategic tool to compare the actual performance of current processes against the potential process when using e-commerce platforms. The researchers first identified the “gap” between the current state and the desired state to highlight areas where improvements or changes are needed. Then, analysis was used to understand shortcomings, inefficiencies, or growth areas to enable key stakeholders within the USMC to understand the potential that e-commerce has to bridge the gaps that were identified.

D. TASK-TECHNOLOGY FIT ALIGNMENT

To identify whether or not current e-commerce platforms fit the needs of the AVLOG community, the TTF model has been applied to analyze the alignment of technology features with task requirements and user abilities within the USMC. TTF, displayed in Figure 2, is a strategy that depicts how features of technology match the requirements of the task and the abilities of the personnel performing it (Fuller & Dennis, 2009). Being able to align the information technology (IT) and the desired end states of a task requires a clear model to provide a pathway to success. TTF provides a measure within the user task domain that best supports the effectiveness of IT-supported decision-making (Goodhue & Thompson, 1995). The core message of this strategy underscores that the positive impact of technology on user performance is contingent upon the alignment of IT services’ functionality with the specific task requirements (Fuller & Dennis, 2009). In the same vein, if the technology fit is poor and it does not serve the direct requirements of the task at hand, then users will face frustration and concern with their performance (Fuller & Dennis, 2009).



TTF (see Figure 2) works through the filtration model, which analyzes the inputs of Task Characteristics and Technology Characteristics. Through further evaluation of these characteristics, TTF breaks down directly to the impacts on performance and the expected consequences of utilization, which then leads to performance impacts. As with any effective strategy, feedback loops provide further support to ensure users and the technology used are both refining the process in order to achieve maximum success. Previous models combined to form TTF were separately lacking in their ability to provide an effective analysis focused on performance impacts through tasks and technology. Therefore, the hybrid approach for TTF ensures all spectrums of tasks and technologies are considered to achieve success in performance impacts.

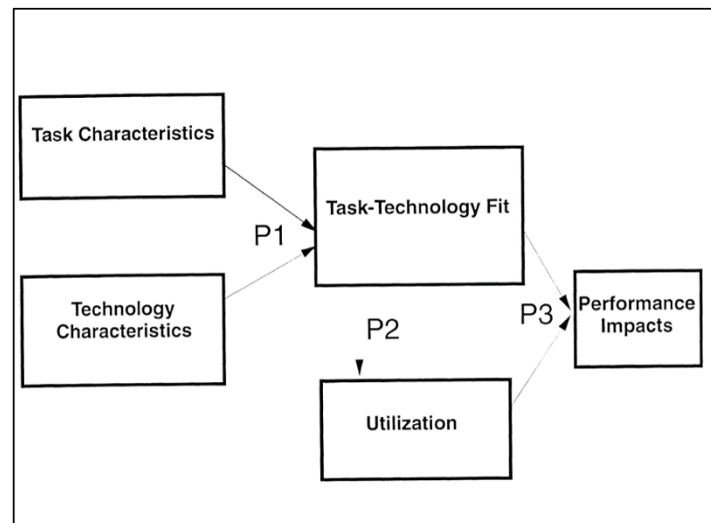


Figure 2. Task-Technology Fit Model. Source: Goodhue and Thompson (1995, p. 225).

Tasks characteristics, which are defined as the behavioral requirement, use given information to accomplish stated goals and provide one characteristic input towards the model (Fuller & Dennis, 2009). Fundamentally, individuals can turn inputs into outputs (Goodhue & Thompson, 1995). Tasks must be centered on achieving set goals while ensuring the user is focused on the requirements set out. This type of characteristic is an important factor that can influence team performance, interaction with variables, and how the users comprehend the assignment (Fuller & Dennis, 2009). The interaction of tasks

while using technology can be widely varied without the proper tasking being described to the users executing their responsibilities.

Technology is a tool used to allow users to conduct their tasks and responsibilities. This characteristic provides the potential features that influence how a team performs its tasks (Fuller & Dennis, 2009). Technology typically refers to computer systems, hardware, software, data, and user services (Goodhue & Thompson, 1995). In addition to the internal functionality of technology, external support services add another layer to enhance useability. From external sources, communication and information processing support ensure sufficient backing, enhancement, and clear definition of their support services to enable users to conduct tasks (Fuller & Dennis, 2009).

After combining both the task and technology characteristics, the next step in the TTF model is the analysis of how the individual uses their technology to complete their tasks. TTF is the correlation between “the task requirements, individual abilities, and the functionality” of the technology capabilities (Goodhue & Thompson, 1995). It is important to realize, however, that certain tasks require certain technological capabilities in order to be successful. If gaps exist between the two components, it puts more strain upon the individuals who are required to perform the tasks and TTF is reduced (Goodhue & Thompson, 1995). As the combination of tasks and technology close in on certain gaps, TTF is increased, which leads to higher performance overall (Goodhue, 1995).

Based on the inputs towards TTF, the model provides outputs that identify the feasibility and usability of performing the tasks with the provided technology. This term is called utilization, which is based on the behavior of executing the technology for completing required tasks, measured as “the frequency of use or the diversity of applications employed” (Goodhue & Thompson, 1995). It is important to note that increased utilization does not equate to better performance, as the utilization of unsupportive technology may lead to stress, bad habits being formed, longer lead times to conduct tasks, and other frustrations (Vendramin et al., 2021).

The final output of the model leads to the performance impacts, which relate to “the accomplishment of the portfolio of tasks by the individual” (Goodhue & Thompson, 1995).



The concept of high performance implies a combination of enhanced efficiency, effectiveness, and superior quality (Goodhue & Thompson, 1995). In the opposite direction, low performance implies a decrease in all the related categories previously stated. The improvement of performance occurs when there is optimal TTF: when the technology used matches the task characteristics in pursuit of supporting the user's end goal (Vendramin et al., 2021).

The TTF model stands out for its capability to consider the design of work. In the field of IT, the term “design of work” refers to the process of organizing and structuring tasks, activities, relationships, and responsibilities within an organization's IT environment. It encompasses the determination of how IT systems, processes, and workflows are designed and implemented to optimize productivity, efficiency, and employee well-being. Assessing technology through the TTF model provides individuals with a structured approach to ensure that the technology provided supports the necessary tasks. The model achieves this by compelling individuals to comprehend the specific tasks users seek to accomplish, evaluating technology to gauge its features and capabilities, and then combining these evaluations to ensure a suitable match. TTF assists individuals in directing their attention to user demands such as data processing, information storage, ease of use, system reliability, information quality, and more, enabling a comprehensive evaluation and accurate prediction of performance impacts. Additionally, while influencing the design of work, the TTF model underscores the importance of aligning technology with the organizational strategy. By using the model, organizations can effortlessly verify that the technology they implement is well-suited to their goals and tasks.

TTF evaluates technology and task fit by assessing the user experience across various dimensions, including data quality, usability, and technology reliability, and by focusing on technology adoption (Vendramin et al., 2021). The perspective assumes that individuals can evaluate how the technology aligns with their required tasks and subsequently estimate the impact of the technology on their performance based on the evaluations. According to TTF, when users conclude that their chosen technology enhances task execution, it leads to increased adoption, usage, and improved performance



(Vendramin et al., 2021). However, improved performance can only result from achieving an optimal TTF for the entire organization. This happens when the technology aligns with the tasks it intends to support while supporting the distinct competences of the users (Vendramin et al., 2021). As a result, users can smoothly execute their tasks while achieving organizational goals (Vendramin et al., 2021).

E. SUMMARY

The application of this thesis approach methodology, regarding the concepts of gap analysis and TTF, suggests that a formally documented and tested process would be necessary to facilitate a well-informed decision on potential amendments to USMC procurement policies and procedures. The objective is to enhance future procurement innovation discussions, enabling a more comprehensive examination in the event of policy modifications.



IV. ANALYSIS AND RESULTS

We cannot continue to rely on the processes and procedures of yesterday and expect them to meet the challenges and threats of tomorrow.

—General Berger, 38th Commandant of the USMC

A. GAP ANALYSIS

1. *Current State*

An estimate suggests that a decade's worth of e-commerce growth was condensed into just three months at the onset of 2020, propelled by the COVID-19 pandemic (GSA, 2022). This surge led to a swift evolution in capabilities and consumer demand within the civilian market, yet its impact was negligible in the military sector. The AVLOG community currently relies on e-commerce platforms like GSA's USMC ServMart, FedMall, and OneTouch, which are in line with existing policies. These systems have historically bolstered the AVLOG community's ability to secure essential items efficiently in compliance with regulations. However, their relevance is dwindling, pushing users towards more effective methods for material procurement.

When considering the supply chain's open purchase method as a holistic system, the platforms used for transactions represent a critical factor. Numerous other variables identified in the literature review, including rules, regulations, and procedural knowledge, are required to successfully initiate open purchasing of materials. The process outlined in Figure 3 is protracted, often spanning weeks before initiation, followed by an average of an additional three weeks for delivery of the purchased materials to the customer (M. Kindschi, personal communication, January 25, 2024). Inefficiencies attributable to limited expertise are compounded by policy and procedural deficiencies that hinder optimal e-commerce utilization.

A significant inefficiency in the system is the obligatory composition of a nonstandard procurement package for each customer-requested item. While meticulous record-keeping is vital to deter misuse and ensure adherence to financial improvement and audit readiness stipulations, rethinking and improving this process could yield considerable



man-hour savings and diminish lead times for the AVLOG community. By leveraging existing technology, it is possible to amplify process efficiencies while maintaining compliance with extant policies and regulations.

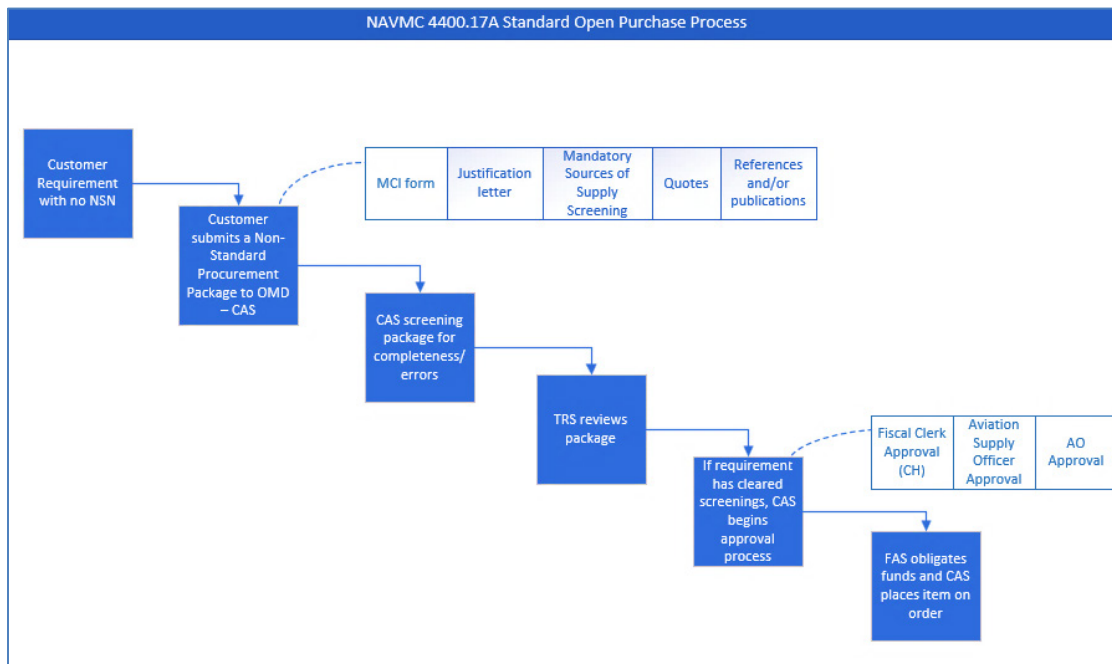


Figure 3. Standard Open Purchase Process

Another barrier that exists within the current system is the lack of understanding of the marketplace applications. As mentioned in the literature review, other branches, government entities, and units within the USMC have successfully purchased from Amazon Business and GSA CPP, while the AVLOG community has not. Part of this gap may be attributed to an apprehension of change that is resulting in a lack of motivation to understand marketplace applications. For example, while speaking with Amazon representatives, they highlighted that while Amazon and GSA are at the same level on the mandatory sourcing list, most individuals do not recognize Amazon as equal to GSA. Further, while speaking with representatives within HQMC I&L, it was noted that individuals at their level do not see any value-added to the supply chain when adding e-commerce platforms such as Amazon to the mix, so they have yet to create a USMC policy to assign with memorandum GPC 2023–04.

The interpretation and level of proficiency surrounding acquisition policy also plays a role. There are 84 references within the ASDTP and many of those references have their own long list of references. With the amount of turnover and rotation of billets with a typical ASD, a lack of understanding or knowledge of all the different policies could be a limiting factor in achieving efficiency with open purchasing. And while proficiency increases at higher echelons, interpretation of policy changes and the perceived effectiveness of those policies change. This disparity was acknowledged during the interview with personnel at HQMC I&L, and was noted as one of the major friction points they experience each day.

The AVLOG supply chain finds itself at a pivotal juncture, where the swift advancements in e-commerce, highlighted by the pandemic-induced growth, clash with the entrenched, slower-moving military procurement processes. Accustomed now to the rapidity of two-day shipping and immediate purchasing in people's personal lives, this expectation starkly contrasts with the current capabilities of the AVLOG system. Despite having platforms like GSA's USMC ServMart, FedMall, and OneTouch, which once met procurement needs, their effectiveness is waning in the face of evolving consumer and technological landscapes. Moreover, navigating the extensive array of acquisition policies, coupled with a high turnover of personnel, presents additional challenges. Nonetheless, with influential documents such as the CPG, NDS, and DPG advocating for change, there is a prime opportunity to overhaul outdated procedures. By simplifying processes and fostering a better grasp of e-commerce tools, the AVLOG community could dramatically improve procurement efficiency, aligning military supply chain responsiveness with the contemporary pace of commercial business practices.

2. Desired State by Directly Utilizing Amazon Business Capabilities

a. Tax Exemption

Federal government entities, such as the DOD, are exempt from paying most taxes to Federal, State, or local authorities (DOD, 2017). Recognizing the imperative for their clients to adhere to regulatory standards, Amazon Business established the Amazon Tax Exemption Program (ATEP). This initiative streamlines tax-exempt purchasing through



easy enrollment, which further facilitates compliant procurement operations for government entities (Amazon Business, n.d.d). For customers enrolled under this program, they are able to set up policies on their marketplace portal to restrict or block their employees from ordering through vendors who do not participate in the ATEP (Amazon Business, 2019). The tax-exempt purchases include “sales from Amazon, [its] affiliates, and participating independent third-party sellers” (Amazon Business, n.d.a).

b. Guided Buying

Amazon Business has introduced Guided Buying, a tool that empowers leadership to establish boundaries and restrictions within the marketplace, ensuring compliance with internal policies and regulations. Guided Buying simplifies the management of employee spending, enabling the implementation of compliance measures. It directs personnel towards appropriate products or suppliers while identifying product categories that should be avoided (Amazon Business, n.d.c). Part of this program allows for the organization to set preferences between preferred, restricted, or blocked products and suppliers. Preferred allows for employees to select products or sellers which should be prioritized first (Amazon Business, n.d.c). Restricted identifies the product categories which should not be purchased because it does not meet the organizations procurement policies, needing approvals to be turned on to enforce these restrictions (Amazon Business, n.d.c). Lastly, blocked helps organizations to avoid any products or vendors which should never be procured through the marketplace (Amazon Business, n.d.c). The application of these policies is visually represented on product or seller pages through a ribbon indicator.

Although Guided Buying offers significant value to agencies, access to the service is exclusively available for Business Prime subscription plan owners. Users must opt into payment packages ranging from \$179 per year to \$10,099 per year to gain access (Amazon Business, n.d.b). Even with the payment barriers, the only way to access the block feature would be through the highest-tier subscription, the Enterprise plan, priced at \$10,099 per year (Amazon Business, n.d.b). Since the government emphasizes policy compliance and procurement regulation, subscription to a payment model becomes crucial for maximizing the benefits of Amazon Business. Per the GPC policy, advance payments are generally



prohibited, except for subscriptions for electronic/data services certified and deemed necessary for operational purposes by the HA (DON, 2015). The FAR 32.404(a)(6) and 31 U.S.C Section 3324(d)(2) further elaborates criteria for advances, with subscriptions exempted from limitations on advance payments. However, CHs must ensure that subscription orders are in the name of the organization or position title, retain renewal notices or statements, and align subscriptions with operational needs (DP&C, n.d.).

c. Section 889 Compliance

Implemented under the FY19 NDAA, the FAR was amended to include Section 889, which aimed to address security threats to the United States and impacted the DOD, GSA, and NASA (FAR, n.d.). “Section 889(a)(1)(A) prohibits the Federal Government from procuring or obtaining, or extending or renewing a contract to procure or obtain ‘any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system,’ on or after August 13, 2019, unless an exception applies or a waiver is granted” (FAR, n.d.). Due to the recent changes, the procurement and contracting communities have been hyper vigilant to ensure they do not conduct financial operations with vendors who are not in Section 889 compliance.

To assist clients in maintaining transparency and verifying compliance with Section 889, Amazon Business offers recommendations for possible solutions. One recommended method is to utilize Guided Buying to block or restrict products identified as covered telecommunication equipment under Section 889 (Amazon Business, n.d.e). Next, third-party vendors who are compliant with Section 889 can complete a Sellers Certification Form, which will display their certification under the seller’s name on the items detail page (Amazon Business, n.d.e). The seller certification program allows third-party sellers to display one or more of 150 plus recognized certifications, which show their diversity, ownership, and quality certifications (Amazon Business, n.d.f). It is important for agencies to download, review, and validate the certification forms, as they are not independently verified by Amazon Business (Amazon Business, n.d.f).



d. Three Way Match (3WM)

Supporting the ongoing effort for auditability, Amazon Business launched an initiative called 3-Way Match (3WM) to automate and increase the speed for the reconciliation process within the marketplace. By consolidating order, item receipt, and invoicing actions into a single platform, the 3WM model enables efficient matching of invoice line-items with receiving status (Amazon Business, n.d.g). By doing so, they effectively eliminated the manual reconciliation process, increasing efficiency in the processing time. In addition, if products become missing, damaged, or are incorrect, Amazon Customer Support integrates with 3WM to conduct problem solving methods to eliminate issues quickly (Amazon Business, n.d.g). Customers can conveniently access and download all essential documentation from a centralized location to support procurement closure throughout their transaction life cycles.

e. Mandatory Source Compliance

In accordance with FAR Part 8, federal agencies CHs are mandated to use their GPC to procure supplies and services through mandatory government sources (FAR 8, 2024). Among the listed priority vendors, there are (1) existing agency inventories, (2) excess from other agencies, (3) Federal Prison Industries (UNICOR), and (4) AbilityOne (FAR 8, 2024). The AbilityOne program was established as a priority initiative to involve individuals who are blind or significantly disabled, in order to deliver high-quality, mission-critical products and services to federal government entities (AbilityOne, n.d.). Amazon Business, in its effort to facilitate compliance with federal regulations for government agencies, has partnered with the National Industries for the Blind (NIB) to launch the AbilityOne storefront. This collaboration provides a convenient platform for purchasing AbilityOne and Skilcraft items in one centralized location (Barringer, 2023). By establishing this partnership with AbilityOne, Amazon Business ensures that government agencies can procure items quickly and efficiently while adhering to federally mandated purchasing from centralized sources.



f. Spending Range Configuration

The \$10,000 micro-purchase threshold for GPC was implemented to facilitate streamlined monitoring of transactions conducted at the CH level, ensuring adherence to the FAR and service component regulations. These checks and balances ensured those with the formal authority were not overspending and were still in compliance. To support adherence with this threshold, Amazon Business has incorporated a functional control mechanism into its standard operating procedures for spending control. Within their respective marketplaces, administrators now have the ability to establish spending ranges for personnel through policy and approval workflows (Amazon Business, 2021). By employing this approach, AO, CO, and/or APC's can set default spend range below \$10,000 to prevent CH's from conducting unauthorized obligations, which would trigger an Anti-Deficiency Act (ADA) violation. Additionally, for those purchases exceeding the micro-purchase threshold, the spend range policy can automatically notify a higher warranted authority in the approval workflow to approve and/or support the larger dollar amount requirement.

3. Desired State by Working through GSA CPP

GSA CPP is primarily a tool available to government entities who are thinking of leveraging e-commerce platforms to conduct their procurement business. The program provides a centralized point for appropriate training, resources, and background checks on e-commerce platforms. This support system provides assurances to various government agencies' leadership that the procurement completed through the e-commerce platforms will be done in compliance with federal regulations, with a reduction in risk through effective supply chain management. The program does not provide a centralized hub or portal to procure directly through the different e-commerce platforms but does provide links to the e-commerce websites and provides necessary resources to help agencies stay informed on compliance and regulatory updates. They also provide access to virtual training sessions for management methods, support through enhanced customer service experience, and the ability to review and analyze commercial item spending data through a data-to-decisions government-wide analytics platform (GSA, n.d.b).



a. Supply Chain Risk Management Implementation

GSA CPP manages various risk factors by monitoring data, incorporating restrictions, and conducting reviews of the program and the e-commerce platform. Using the excluded vendor list on SAM.gov, the program restricts any sales from those vendors that may cause compliance issues (GSA, n.d.a). They conduct the pre-established terms and conditions for these platforms rather than individual agencies having to agree to various potentially incompatible commercial terms (GSA, 2020). Additionally, they leverage existing commercial practices adopted by the e-commerce platforms to combat counterfeiting and to help better manage the risks involved using resources, tools, and processes in place (GSA, n.d.a). GSA CPP representatives add a layer of security, as they conduct continuous monitoring of post-purchase spending data, which helps to identify any purchases that may be deemed suspicious to ensure the proper training and education can be provided to the clients to prevent future incidents (GSA, n.d.a). GSA also allows agencies access to their spending data in real-time through a “[data-to-decisions] platform that offers up-to-the-minute order status, tracking and delivery information, invoicing, and reconciliation reports” (GSA, 2023b). To further minimize risks, monthly operational dashboards furnish program managers and procurement executives with standardized spend data and customer experience feedback, offering vital insights into their interactions with the program (GSA, 2023b).

b. Enhanced Customer Experience

With access to new e-commerce platforms, GSA CPP recognizes the need to provide support and resources to better enable customers to make the right purchasing decisions. One of the benefits highlighted for participating agencies is the broad and highly competitive access to various supplier products to quickly fill their requirements, especially in isolated areas or in support of emergency response, while simultaneously ensuring a familiar customer-like procurement experience (GSA, 2021). Additionally, they provide a dedicated group that manages the entire process, from adjusting management, supply chain risk management, to purchase analytics (GSA, 2021). While the program has been running, GSA has done their homework to collect survey information and feedback to support the



customer experience, as seen in Figure 4. They implemented a customer experience framework to gather survey data from agencies about the current state and future state usage of the awarded platforms (GSA, 2021). The survey data, which measures overall satisfaction from the platforms and in-depth user interviews, helps to inform the key performance indicators and identify areas that need improvement and/or enhancement (GSA, 2021). This, therefore, shows participating agencies GSA CPP's willingness to take feedback and customer-supplied information to continue to produce a better and more effective program for all federal agencies.



Figure 4. Feedback from E-Marketplace Model Buyers. Source: GSA (2023b).

c. Online Virtual Training and Support

One focus of GSA's support structure is providing virtual training to participating agencies. Through these "Meet the Platform" Zoom sessions, the GSA CPP representatives conduct live training to provide awareness of the partnered platforms (GSA, 2024b). These in-depth platform sessions include ways to conduct "account management, market research capabilities around AbilityOne, small businesses, Section 889 compliance, and others, order placement and management, and platform enhancements" (GSA, 2024b). Currently,

there are three customer demonstrations sessions per month, where several thousand attendees log on to better understand the features and capabilities of the CPP (GSA, 2022). Since the program has recently grown from the original three awarded platforms to eight awarded platforms, more scheduled virtual training sessions are likely to occur, including an expansion to the subject material taught. Additionally, there is the ability to schedule individual platform demonstrations separately, to learn more about the implementation steps available one-on-one (GSA, 2023b).

B. TASK-TECHNOLOGY FIT ANALYSIS OF AMAZON BUSINESS

When applying TTF in the AVLOG community, e-commerce platforms seem to have significant potential to support the organization's strategy. Since the primary objective of the AVLOG community is to support flight line operations efficiently, it is imperative that the selected e-commerce platform can support this mission. In choosing a platform, users must consider maintaining an adequate stock of materials, swiftly procuring any items that are not readily available, and ensuring a fast and cost-effective supply chain. Thus, while examining how to increase effectiveness, the researchers concluded that AVLOG tasks aligned with the technology characteristics available on the e-commerce platform, Amazon Business. Amazon Business has easily digestible data analytics and is also customizable for government entities to control and monitor purchases. This is extremely important to protect against misuse of government spending while ensuring purchases go through the proper approval process. This is also very beneficial as the ability to provide a level of flexibility that the community has not yet seen. Amazon Business also offers a combination of a wide selection, convenience, and value through an interface that is nearly identical to the regular Amazon storefront, resulting in little time or effort spent training individuals how to navigate the platform. These all yield to high adoption, high utilization, and thus, positive impacts on individuals' performance as well as the community's performance.

C. TASK-TECHNOLOGY FIT ANALYSIS OF CPP

The CPP is another strong option for AVLOG community to test its ability to support flight line efficiency. With more companies partnering with GSA, the CPP has the



potential to give the community more than just one way to exploit the use of e-commerce. Using the CPP would allow for easier compliance with screening and purchasing from eight large businesses that the community does not currently have access to. Like Amazon Business, the CPP also has easily digestible and up-to-date data analytics through their data-to-decision platform. What stands out the most is that purchasing from businesses through the CPP appears extremely low risk due to GSA's various risk mitigations. Additionally, the paramount advantage of opting for the CPP over Amazon Business or any of the other seven selected platforms lies in the cost-effectiveness it offers. All the membership benefits provided by these platforms come at no extra charge within the CPP, as the fees are already integrated into the program (S. Johnson., personal communication, April 25, 2024). Without testing the platform, there is no way to compare the ease of use of the CPP; however, customer survey data shows promising results. Thus, it is logical to conclude that CPP, if highly adopted by the AVLOG community, would have positive impacts.



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V. FINDINGS AND DISCUSSION

Integrating additional e-commerce platforms into Marine Corps supply chain may be complex. However, it is essential that the USMC AVLOG community pursue this innovation to streamline its processes and enhance its use of technology effectively.

- (1) How can the USMC AVLOG community best exploit the use of e-commerce platforms to procure non-aeronautical consumables?

To fully exploit the use of e-commerce platforms for non-aeronautical consumable material, the researchers believe the USMC AVLOG community should explore using Amazon Business either directly one-on-one or through GSA CPP. While other e-commerce platforms exist and could later be explored, CPP and Amazon Business seem to be the best-fit platforms because the DOD allows their use, other entities are already using them, and both companies are ready to adopt USMC as a customer. To begin exploiting the use of these platforms, it is believed there needs to be a collaborative effort among a broad spectrum of stakeholders. This would include senior leaders, private sector partners, and representatives from every command level down to the end-users. A streamlined, iterative strategy in which structured pilot programs and testing can be conducted without compromising operational readiness would be critical. A continuous feedback loop from all stakeholders would provide the data to confirm or deny that the use of these platforms is addressing current inefficiencies, that they are adaptable to evolving operational challenges, and that the units which are piloting the programs are following proper procedures while testing. This feedback loop will also provide critical feedback to higher echelons to further identify the gaps that exist between old and new policies as well as old and new technologies.

- (2) Are there self-imposed restrictions that prevent the AVLOG community from using e-commerce?

The biggest restrictions found are related to resistance to change. While the NDS, CPG, and DPG emphasize innovation and change, both are easier said than done. While there seems to be widespread dissatisfaction with regard to procurement processes, the



USMC AVLOG community and key stakeholders need to come together to identify the process for change and then begin implementing it.

- (3) Are there other efficiencies to be realized through the use of e-commerce platforms?

Based on the research, it is believed that e-commerce platforms, such as Amazon Business and those partnered with GSA CPP, offer a variety of useful functions that increase procurement management, tracking, and analytical support for supply and financial resources. Leveraging the commercial sector's extensive resources while maintaining government regulatory compliance standards simultaneously supports less internal resource usage by maximizing the use of external organizations' resources.

While Amazon Business lets government agencies quickly see whether vendors are Section 889 compliant on their item display pages, the site lacks independent verification, forcing the individual procurement professionals to do their due diligence before making purchases. However, Amazon Business does make it easy for federal agencies to enroll in their tax exemption program, which would further restrict or block the procurement professionals from accidentally making purchases from vendors who do charge taxes of their items.

Another efficiency is that Amazon Business offers a consolidated portal that enables users to centralize their procurement functions, similar to commercial customers and how they use their Amazon accounts. The company also offers spend range configuration and control, which is important in maintaining compliance for purchases at or below the micro-purchase threshold. Additionally, the Guided Buying function, which quickly identifies preferred, restricted, and blocked vendors is another risk management feature. It allows leadership in the hierarchy to configure all mandatory source compliance measures, such as AbilityOne and Skilcraft items, to be selected as preferred. This reinforces the internal Amazon Business function and mandatory source compliance, according to the FAR. The 3WM model offered by Amazon Business is a key function that has the capability to enhance audit readiness and streamline reconciliation management, as it centralizes the ordering, item receipt, and invoicing actions into a singular platform, which increases visibility and decreases manual actions for all procurement items.



The GSA CPP effectively addresses the verification challenges that Amazon Business and other platforms face by implementing comprehensive data monitoring, integrating restrictions, and periodically reviewing the program to ensure compliance with DOD policies. Additionally, the GSA CPP's data-to-decisions platform offers a range of data visualization tools that enable leaders to access live, current analytics on their transactions—a capability not presently available in the AVLOG community. Although the Commercial Platforms Program (CPP) is not an independent platform, it provides government agencies with a secure way to use Amazon Business and seven additional platforms not examined in this thesis. This opens up opportunities for future research into potential efficiencies that these newly awarded platforms might offer to the AVLOG community for purchasing non-aeronautical material.



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VI. RECOMMENDATIONS AND CONCLUSION

A. RECOMMENDATIONS

The DOD has provided units with the chance to leverage e-commerce platforms via the use of GPC policy provisions outlined in memorandum 2023–04, and it is crucial for the ALVOG community to capitalize on this opportunity to enhance supply chain agility and efficiency. Thus, it is the researchers’ recommendation that HQMC allows units to test the utilization of Amazon Business and GSA CPP to purchase non-aeronautical material through an exception to policy in which the open purchase process can be amended, as shown in Figure 5. Using the iterative strategy that was previously noted, data could be gathered to confirm or deny that the use of these platforms is adding value to the AVLOG supply chain. Exploring the use of e-commerce with an in-depth review will then yield essential insights for senior management, facilitating the identification of discrepancies between legacy and current policies, as well as between established and emerging technologies.

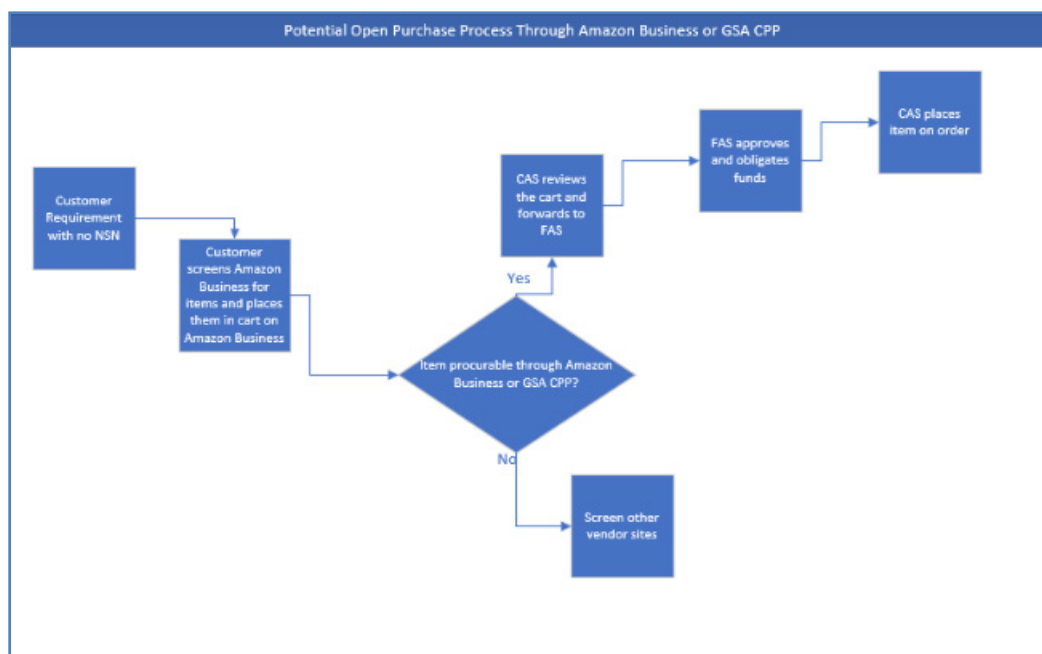


Figure 5. Proposed New Open Purchase Process

B. CONCLUSION

TTF emphasizes the necessity of a strong fit between the selected technology and the required tasks to attain a competitive advantage, but implementing a new technology in an organization is much easier said than done. Research suggests emphasizing considerations which are related to system selection, system deployment, and change management, as well as looking beyond current requirements or tasks and ensuring there is enough flexibility in the technology to handle future requirements (Fuller & Dennis, 2009). In analyzing the role of Amazon Business and the CPP in the AVLOG community through the TTF model, the researchers concluded that both the Amazon Business and CPP platform are highly compatible with the needs of Marine Corps aviation. The Amazon Business platform offers data analytics, customization for government entities, a wide selection of products, convenience, and value. The CPP offers data analytics, additional risk mitigation, and the opportunity to confidently purchase from eight platforms. These features contribute to high adoption and utilization, positively impacting individual and community performance.

The researchers anticipate that the thesis's comprehensive analysis of AVLOG procedures, alongside USMC and DOD policies, coupled with the understanding of e-commerce platform capabilities, will provide the USMC with an in-depth awareness of existing supply chain shortcomings. Additionally, it should clarify how e-commerce platforms could be instrumental in boosting supply chain agility and efficiency, which are critical for future warfighter support. By integrating Amazon Business and/or GSA CPP into their operations, the AVLOG community stands to gain from a more efficient and streamlined procurement process characterized by centralized digital data management. This could significantly contribute to improved audit performance, better data unification, and a reduced duration for the assembly and submission of open purchase packages. Furthermore, using e-commerce platforms is likely to accelerate the procurement of non-aeronautical materials, consequently enhancing the overall readiness of flightline operations.

This analysis illustrates the probable enhancements in efficiency that could result from policy and procedural updates, yet it is important to recognize that the researchers



findings are constrained to theoretical analysis. In order to fully grasp the practical advantages that platforms like Amazon Business and GSA CPP might offer to the AVLOG community, it is essential for HQMC to authorize empirical testing in a real-world environment. Initiating this practical evaluation could begin with an exemption to current policy; however, it is imperative to revise outdated policies to align with DOD directives, thereby eliminating existing inefficiencies. Such policy modernization is crucial for facilitating broader-scale experimentation. Despite its limitations, it is the researchers belief that this research lays the groundwork and initiates the crucial dialogue needed to drive reform in AVLOG operations. It is instrumental in leading the charge towards policy realignment and modernization. Furthermore, the potential impact of this study may extend well beyond the AVLOG community, as a successful use case example could allow for widespread adoption since many of the policies and processes under review could influence the broader Marine Corps.



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APPENDIX. INTERVIEW QUESTIONS

A. AMAZON INTERVIEW QUESTIONS

1. Can you talk about the successes Amazon Business has experienced doing business with the government?
2. Can you describe the issues and challenges you have experienced doing business with the government?
3. Do you have a process for allowing the lowest-priced product to filter to the top for customer ease?
4. Does Amazon Business maintain the same return policy as with regular customers/businesses who partner with Amazon?
5. Does Amazon Business offer specialized customer service (and/or a representative) for government business support or is there a team that primarily covers Amazon Business clients?
6. Are GCPC's the only primary form of conducting transactions or have Wide Area Work Flow (WAWF) Misc Pays been used in the past?
7. Do companies have Unique Entity ID and Cage codes?



B. GSA CPP INTERVIEW QUESTIONS

1. What does the user interface look like when working through the CPP to purchase through Amazon?
2. Is the cart on a GSA portal or the Amazon Portal?
3. Are there any additional benefits to working with the CPP vs. Amazon Business directly?
4. Are there any drawbacks? Do users miss out on any Amazon benefits by going through the CPP?
5. Are there currently any USN or USMC accounts registered for the CPP?
6. Has anyone attempted to work with USN and USMC? How did that go?
7. Are there any more current metrics beyond what was published on the 2022 report?
8. What products are primarily purchased through the CPP?
9. Who is the CPPs largest customer?
10. Will CPP be a long-term program with the possibilities of adding other companies besides Amazon, Overstock and FisherSci?



C. HQMC I&L INTERVIEW QUESTIONS

1. How are the current memorandums being interpreted at higher levels?
2. What is the largest concern with units in the Wing sourcing non-NSN materials directly from Amazon if other branches and ground units have been able to purchase from them?
3. Is there any possibility of the AVLOG community creating and utilizing Amazon Business accounts for micro-purchases in the future?
4. Are there any restrictions on using the CPP within the Marine Corps?
5. Is there any possibility of the AVLOG community creating and utilizing the CPP for micro-purchases?



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