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Services Supply Chain in the Department of Defense: Drivers of Acquisition Management Practices in the Army

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Preface & Acknowledgements

Welcome to our Ninth Annual Acquisition Research Symposium! This event is the highlight of the year for the Acquisition Research Program (ARP) here at the Naval Postgraduate School (NPS) because it showcases the findings of recently completed research projects—and that research activity has been prolific! Since the ARP's founding in 2003, over 800 original research reports have been added to the acquisition body of knowledge. We continue to add to that library, located online at www.acquisitionresearch.net, at a rate of roughly 140 reports per year. This activity has engaged researchers at over 60 universities and other institutions, greatly enhancing the diversity of thought brought to bear on the business activities of the DoD.

We generate this level of activity in three ways. First, we solicit research topics from academia and other institutions through an annual Broad Agency Announcement, sponsored by the USD(AT&L). Second, we issue an annual internal call for proposals to seek NPS faculty research supporting the interests of our program sponsors. Finally, we serve as a "broker" to market specific research topics identified by our sponsors to NPS graduate students. This three-pronged approach provides for a rich and broad diversity of scholarly rigor mixed with a good blend of practitioner experience in the field of acquisition. We are grateful to those of you who have contributed to our research program in the past and hope this symposium will spark even more participation.

We encourage you to be active participants at the symposium. Indeed, active participation has been the hallmark of previous symposia. We purposely limit attendance to 350 people to encourage just that. In addition, this forum is unique in its effort to bring scholars and practitioners together around acquisition research that is both relevant in application and rigorous in method. Seldom will you get the opportunity to interact with so many top DoD acquisition officials and acquisition researchers. We encourage dialogue both in the formal panel sessions and in the many opportunities we make available at meals, breaks, and the day-ending socials. Many of our researchers use these occasions to establish new teaming arrangements for future research work. In the words of one senior government official, "I would not miss this symposium for the world as it is the best forum I've found for catching up on acquisition issues and learning from the great presenters."

We expect affordability to be a major focus at this year's event. It is a central tenet of the DoD's Better Buying Power initiatives, and budget projections indicate it will continue to be important as the nation works its way out of the recession. This suggests that research with a focus on affordability will be of great interest to the DoD leadership in the year to come. Whether you're a practitioner or scholar, we invite you to participate in that research.

We gratefully acknowledge the ongoing support and leadership of our sponsors, whose foresight and vision have assured the continuing success of the ARP:

- Office of the Under Secretary of Defense (Acquisition, Technology, & Logistics)
- Director, Acquisition Career Management, ASN (RD&A)
- Program Executive Officer, SHIPS
- Commander, Naval Sea Systems Command
- Program Executive Officer, Integrated Warfare Systems
- Army Contracting Command, U.S. Army Materiel Command

- Office of the Assistant Secretary of the Air Force (Acquisition)
- Office of the Assistant Secretary of the Army (Acquisition, Logistics, & Technology)
- Deputy Director, Acquisition Career Management, U.S. Army
- Office of Procurement and Assistance Management Headquarters, Department of Energy
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- Deputy Assistant Secretary of the Navy, Acquisition & Procurement
- Director of Open Architecture, DASN (RDT&E)
- Program Executive Officer, Littoral Combat Ships

We also thank the Naval Postgraduate School Foundation and acknowledge its generous contributions in support of this symposium.

James B. Greene Jr.
Rear Admiral, U.S. Navy (Ret.)

Keith F. Snider, PhD
Associate Professor

Panel 16. DoD Services Contracting: Trends and Characteristics

Thursday, May 17, 2012	
9:30 a.m. – 11:00 p.m.	**Chair: Mr. Richard T. Ginman,** Director, Defense Procurement and Acquisition Policy **Discussant: Alan Chvotkin Esq.,** Executive Vice President and Counsel, Professional Services Council ***U.S. Department of Defense Services Contract Spending and the Supporting Industrial Base, 2000–2011*** David Berteau, Guy Ben-Ari, Greg Sanders, David Morrow, and Jesse Ellman, *Center for Strategic and International Studies* ***Services Supply Chain in the Department of Defense: Drivers of Acquisition Management Practices in the Army*** Rene Rendon, Uday M. Apte, and Aruna Apte *Naval Postgraduate School*

Richard T. Ginman—Mr. Richard T. Ginman assumed the position of director of defense procurement and acquisition policy (DPAP) in June 2011. In that capacity he is responsible for domestic, international, and contingency contract policy, acquisition policy and oversight of DoD 5000.1 and 5000.2, oversight of the DFARS and the DoD member of the FAR council, program development and implementation with regard to e-business, and, finally, oversight of the purchase card program. He also serves as co-leader and proponent of the pricing and contracting community within the DoD.

He assumed the position of DPAP in March 2010. In February 2008 he assumed the position of principal deputy to the director of DPAP. In that capacity, he is the principal advisor to the director for all contracting and procurement policy areas, including program acquisition strategies, incentives, program execution, peer reviews, contingency contracting, and acquisition policy.

Mr. Ginman has more than 37 years of experience in government and commercial business in the fields of contracting, acquisition management, logistics, and financial management. Among his previous assignments, he has been the vice president, Maritime Information Systems for General Dynamics Advanced Information Systems; director of contracts, Digital System Resources; commander, Navy Exchange Service Command; deputy for acquisition and business management for the assistant secretary of the Navy (RD&A); and deputy commander for contracts, Naval Sea Systems Command.

Throughout his career, Mr. Ginman has led large organizations with complex budget and fiscal challenges during periods of substantial change. In addition to the positions above Mr. Ginman's extensive work experience includes tours at the Naval Ordnance Systems Command; Naval Sea Systems Command; Naval Air Systems Command; Naval Regional Contracting Office, Long Beach; Long Beach Naval Shipyard; Office of the Secretary of Defense; and U.S. Embassy, Morocco. In addition he has served on USS *Puffer* (SSN 652), USS *Ranger* (CV 61), and USS *Hunley* (AS 31).

Mr. Ginman was commissioned an ensign in the Supply Corps, United States Navy in 1970 and retired as a rear admiral in 2000. He received a Bachelor of Arts degree from Williams College, a Master of Business Administration degree from George Washington University, and attended the University of Southern California's Executive Program in Business Administration. He has received

the Office of the Secretary of Defense Medal for Exceptional Civilian Service (2009, 2011). His personal military awards include the Defense Superior Service Medal, Legion of Merit, Defense Meritorious Service Medal, Meritorious Service Medal, and Navy Commendation Medal.

Alan Chvotkin—Chvotkin is one of the most knowledgeable and respected experts on federal acquisition policy, legislation, and regulation. At Professional Services Council (PSC), he is responsible for the association's legislative and regulatory policy affecting PSC's membership. Chvotkin is an active and founding member of the industry's Acquisition Reform Working Group, which was established in 1993.

In his early career, Chvotkin served as professional staff to the Senate Budget Committee and to the Senate Governmental Affairs Committee. He became counsel and staff director to the Senate Small Business Committee and then counsel to the Senate Armed Services Committee.

Prior to joining PSC, he was a vice president of AT&T Government Services, where he was responsible for managing key AT&T programs and opportunities. Earlier at AT&T, he was the vice president responsible for the government contracts, pricing, compliance, and proposal development organizations. From 1986 to 1995, he was corporate director of government relations and senior counsel at Sundstrand Corporation.

Chvotkin is a member of the Supreme Court, American, and District of Columbia Bar Associations. He is also a member of the National Contract Management Association and serves on its national board of advisors and as a fellow of the organization. Chvotkin is also a two-time "Fed 100" winner. He has a law degree from The American University's Washington College of Law, a master's degree in public administration and a bachelor's degree in political science.

Services Supply Chain in the Department of Defense: Drivers of Acquisition Management Practices in the Army

Rene Rendon—Rendon is an associate professor at the Naval Postgraduate School (NPS), where he teaches defense acquisition courses. Prior to his appointment at the NPS, he served for more than 22 years as an acquisition and contracting officer in the United States Air Force, retiring at the rank of lieutenant colonel. His Air Force career included assignments as a contracting officer for the Peacekeeper ICBM, Maverick Missile, and the F-22 Raptor. He was also the director of contracting for the Air Force's Space-Based Infrared satellite program and the Evolved Expendable Launch Vehicle rocket program.

Uday M. Apte—Apte is a professor of operations management at the Graduate School of Business and Public Policy at the Naval Postgraduate School (NPS) in Monterey, CA. Before joining the NPS, Apte taught at The Wharton School, University of Pennsylvania, Philadelphia, PA, and at the Cox School of Business, Southern Methodist University, Dallas, TX. Apte holds a PhD in decision sciences from The Wharton School, University of Pennsylvania. Prior to his career in academia, Apte worked for over 10 years in managing operations and information systems in the financial services and utility industries.

Aruna Apte—Apte is an assistant professor in the Operations and Logistics Management Department of the Graduate School of Business and Public Policy at the Naval Postgraduate School in Monterey, CA. Her research interests are in the areas of developing mathematical models and algorithms for complex, real-world operational problems using techniques of optimization. [auapte@nps.edu]

Abstract

In this research, we reviewed contract files and interviewed subject-matter experts to collect and analyze data regarding the Army's contract and management practices in the acquisition of services. We examined 154 contracts for four specific service types at eight U.S. Army Mission and Installation Contracting Command (MICC) organizations. The goal was to answer three research questions: (1) Do the contract characteristics differ for different types of services? (2) Do the types of services being acquired affect the management practices being used? (3) Does the capacity for carrying out acquisition-related work affect the management practices being used? The evaluation of the six contract characteristics revealed that a relationship does exist between service type and three of the contract characteristics—contract cost, number of modifications, and contract award strategies. The evaluation of the 13 management practices showed that there exists a relationship between service type and five of the management practices: the use of independent government estimates (IGE), the number of personnel assigned to a contract, the officer serving as the acquisition lead, the use of a quality assurance surveillance plan (QASP), and the use of an IGE for contracts valued over the simplified acquisition threshold. Our research findings also suggested that a relationship does exist between capacity and management practices and that further research is needed to confirm this relationship. Based on the findings of our research, we make several specific recommendations to the U.S. Army MICC for improving the efficiency and effectiveness in the acquisition of these four specific service types.

Introduction

As shown in Figure 1, contract characteristics are affected by the type of service being acquired, while the management practices being used are influenced by the services being acquired, the contract characteristics, and, more importantly, the capacity available to perform the acquisition work. As indicated in Figure 1, the primary question driving our research is "what drives the performance of services contracts?" Our approach in answering this primary question is to break down the overall services acquisition system into smaller parts, gain understanding of the functioning of each part, and then put all the pieces together to better understand the overall system and answer the primary question. Hence,

this research project focuses mainly on understanding the drivers of management practices (i.e., the factors that promote or obstruct the use of best practices in acquisition management), which in itself is a worthy and non-trivial goal. The results of this research will then be highly useful in our follow-on research, wherein we will return to answering the primary question of "what drives the performance of services contracts?"

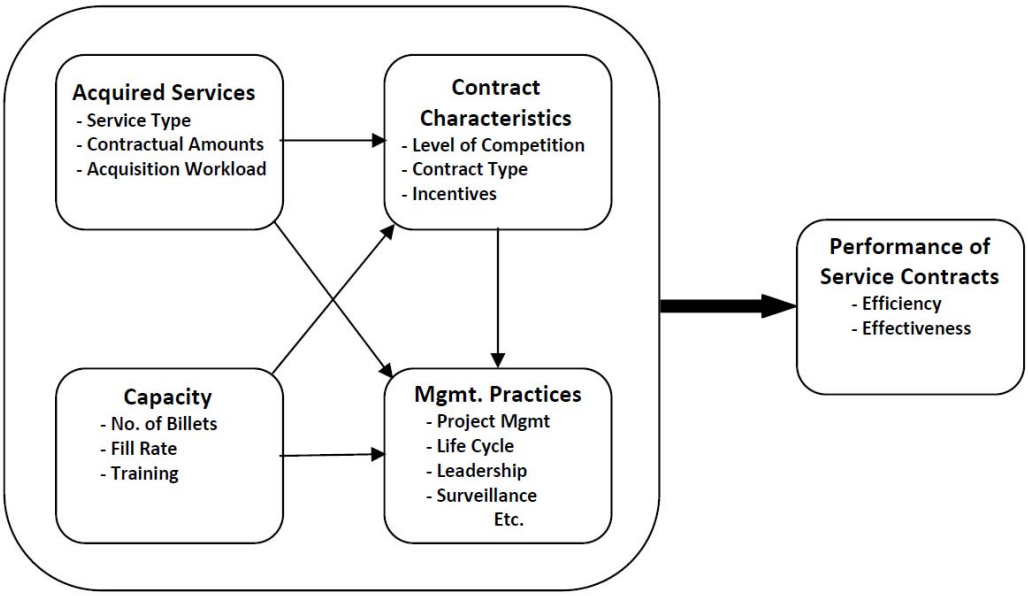

Figure 1. Drivers of Acquisition Practices and Performance

The objective of this research project is to build on the understanding developed in prior research projects by undertaking a focused, in-depth study of services acquisition in the Army so as to understand the drivers of acquisition management practices (i.e., the factors that promote or obstruct the use of best practices in acquisition management). Hence, this research focuses on answering three specific research questions:

- Do the contract characteristics differ for different types of services?
- Do the types of services being acquired affect the management practices being used?
- Does the capacity for carrying out acquisition-related work affect the management practices being used?

Our research methodology included conducting contract file reviews to capture specific contract data and conducting interviews with subject-matter experts to gather information on management practices. The contract file reviews were documented using a data collection form that was specifically developed for this research and that was pilot tested and used in earlier empirical studies (McFall & La, 2011; Ramos & Nabors, 2011). The contract file reviews and subject-matter expert interviews were conducted in 2011 at eight U.S. Army Mission and Installation Contracting Command (MICC) contracting organizations. A total of 154 contracts were reviewed at these eight organizations. The research was focused on the following four product service codes (PSCs):

- R (Professional, Administrative, and Management Support Services)
- J (Maintenance, Repair, and Rebuilding of Equipment Services)
- S (Utilities and Housekeeping Services)

- D (Automatic Data Processing and Telecommunications Services)

These service types are common throughout the Department of Defense (DoD) and the U.S. Army, and they accounted for over 60% of Army services procurement dollars in fiscal year (FY) 2009 (McFall & La, 2011).

The contract file reviews and subject-matter expert interviews were focused on the following contract characteristics and management practices:

- *Contract Characteristics:* level of competition; contract type; award/incentive fee; contract cost; number of modifications; and award basis.
- *Management Practices:* use of independent government estimate (IGE); number of personnel assigned; use of a team approach; acquisition leadership; contract award time; acquisition plan; PWS/SOW; price analysis; price negotiation memorandum; quality assurance plan; and closeout letter.

In answering the research questions, we used descriptive and inferential statistics to analyze the data on service type, contract characteristics, and management practices. We explored the relationship between service type and contract characteristics and between service type and management practices using the chi-square test of independence. We tested our null hypothesis that there is no significant statistical dependence between service type and contract characteristics or between service type and management practices.

The Empirical Study: Data, Analysis, and Results

In this section, we present the results of our survey and its analysis. As discussed earlier, the survey was conducted at eight MICC offices to collect data on four service types for 154 contracts. This data was analyzed to answer the three research questions identified earlier.

We used the statistical technique of chi-square hypothesis testing to answer the first two research questions (i.e., to determine whether or not there exists a relationship between the service type and specific contract characteristics and between the service type and specific management practices). We present the data and discuss our analysis and results in the following three subsections to answer the three research questions, respectively.

Service Type and Contract Characteristics

The focus of our first research question was to determine whether a relationship exists between service type and contract characteristics. As illustrated in Figure 2, we collected and analyzed each service type's relationship with six specific contract characteristics: (1) level of competition used, (2) contract type, (3) award/incentive fee, (4) contract cost in dollar value, (5) number of modifications, and (6) award basis. The results of the chi-square test are presented in Table 1, while a summary of the survey data is presented in Table 2. After presenting these results, we discuss the details of the relationship between service type and each contract characteristic.

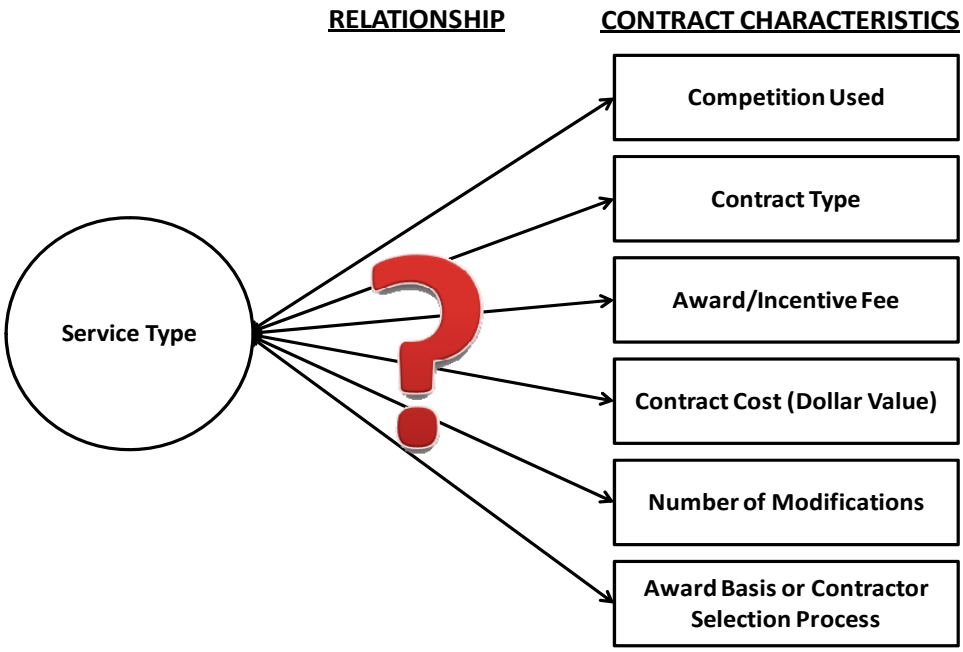

Figure 2. Relationship Between Service Type and Contract Characteristics

Table 1. Results of Chi-Square Test Between Service Type and Contract Characteristics

Factor 1	Factor 2	*p* value	Significance	Reject Null Hypothesis?
Service Type	Level of Competition Used	0.8958	> 0.05	No
Service Type	Contract Type	Not Applicable	Not Applicable	No
Service Type	Award/Incentive Fee	Not Applicable	Not Applicable	No
Service Type	Contract Cost (Dollar Value)	0.0022	< 0.05	Yes
Service Type	Number of Modifications	0.0442	< 0.05	Yes
Service Type	Award Basis or Contractor Selection Process	0.0268	< 0.05	Yes

Table 2. Survey Data on Service Type and Contract Characteristics

Contract Characteristic	Service Type D	J	R	S	Total
Level of Competition					
Full/Open Competition	18	18	27	23	86
Sole Source	16	11	22	19	68
Total	34	29	49	42	154
Sole Source Justification					
Only Provider	5	3	17	1	26
Unusual/Compelling Urgency	3	3	1	4	11
Set Aside	8	4	4	3	19
Ability One		1		5	6
Utilities				6	6
Subtotal Sole Source	16	11	22	19	68
Contract Type					
Firm-Fixed Price	34	29	49	42	154
Cost Reimbursable	0	0	0	0	0
Total	34	29	49	42	154
Award/Incentive Fee					
Yes	0	0	0	1	1
No	34	29	49	41	153
Total	34	29	49	42	154
Contract Cost ($)					
Cost > $100K	12	6	23	27	68
Cost ≤ $100K	22	23	26	15	86
Total	34	29	49	42	154
Type of Modifications					
Option	16	20	30	27	93
Funding	21	40	113	108	282
Admin	19	21	70	39	149
Termination	0	0	1	0	1
Novation	1	0	2	0	3
Supplemental	0	0	2	0	2
Total	57	81	218	174	530
Award Basis or Contractor Selection Process					
LPTA	17	16	18	18	69
Direct Award	8	4	13	7	32
Ability One	0	1	0	7	8
Bast Value	1	2	9	4	16
Urgent/Compelling	2	2	3	4	11
Only Provider	6	4	6	2	18
Total	34	29	49	42	154

Service Type and Management Practices

For our second research question, we investigated whether a relationship exists between service type and management practices. As illustrated in Figure 3, we considered 13 management practices.

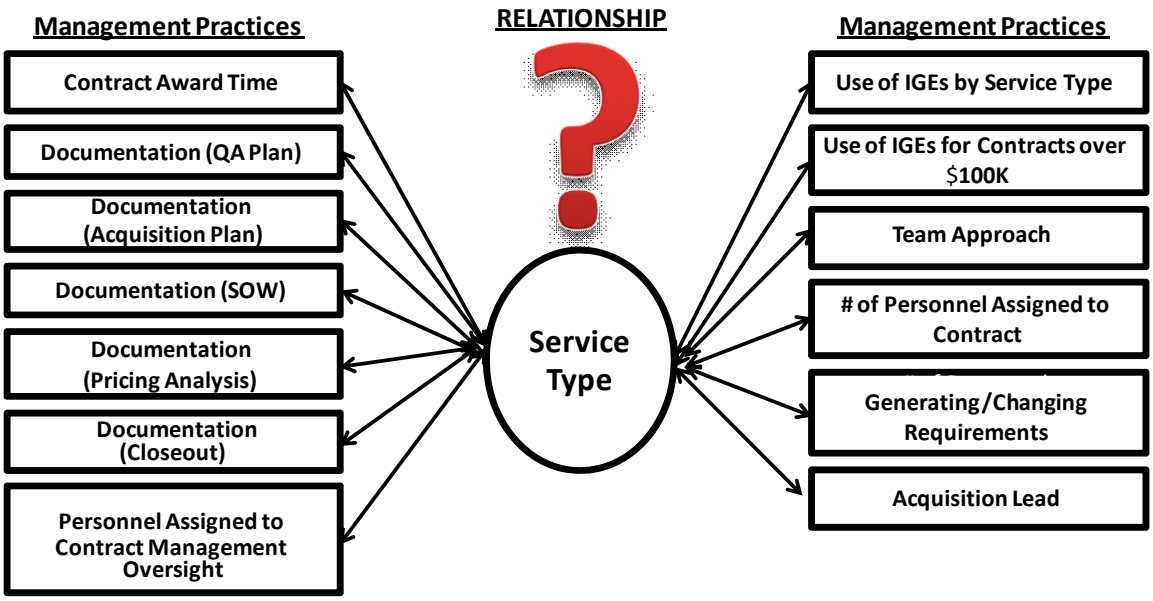

Figure 3. Assessment of Relationship Between Service Type and Management Practices

The majority of the management practices we evaluated showed no evidence of a relationship between the two factors. Specifically, the chi-square test results suggested that a relationship exists between service type and the following management practices: the use of IGEs, the use of IGEs provided for contracts based on contract value, the number of personnel assigned to a contract, the contracting lead for the requirement, and the use of a quality assurance surveillance plan (QASP). A summary of the survey data about the relationship between service type and management practices is given in Table 3, and a summary of the chi-square test results about the relationship are presented in Table 4.

Table 3. Chi-Square Hypothesis Testing Results Between Service Type and Management Practices

Factor 1	Factor 2	*p* value	Significance	Reject Null Hypothesis?
Service Type	Use of IGEs by Service Type	0.0068	< 0.05	Yes
IGE	Use of IGEs for Contracts over $100K	0.0002	< 0.05	Yes
Service Type	No. of Personnel Assigned to Contract	0.0449	< 0.05	Yes
Service Type	No. of Personnel Generating/Changing Requirements	0.0822	> 0.05	No
Service Type	No. of Personnel Assigned to Contract Management Oversight	0.1695	> 0.05	No
Service Type	Team Approach	0.3142	> 0.05	No
Service Type	Acquisition Lead	0.0076	< 0.05	Yes
Service Type	Contract Award Time	0.1127	> 0.05	No
Service Type	Documentation (Acquisiton Plan)	0.5665	> 0.05	No
Service Type	Documentation (PWS/SOW)	0.6909	> 0.05	No
Service Type	Documentation (Pricing Analysis)	0.5391	> 0.05	No
Service Type	Documentation (PNM)	0.0871	> 0.05	No
Service Type	Documentation (QASP Plan)	0.0115	< 0.05	Yes
Service Type	Documentation (Closeout Letter)	0.4676	> 0.05	No

Table 4. Survey Data on Service Type and Management Practices

Management Practice	Service Type D	J	R	S	Total
Use of IGEs by Service Type					
No	27	16	20	23	86
Yes	7	13	29	19	68
Total	34	29	49	42	154
Team Approach					
No	18	10	19	14	61
Yes	16	19	30	28	93
Total	34	29	49	42	154
No. of Personnel Assigned to Contract					
1	2	2	0	0	4
2	10	2	9	13	34
3	14	20	25	14	73
4	2		8	4	14
5	6	5	5	9	25
6	0	0	1	0	1
8	0	0	1	2	3
Total	34	29	49	42	154
Acquisition Lead					
Contract Specialist	2	5	0	1	8
Contract Lead	32	24	49	41	146
Total	34	29	49	42	154
No. of Personnel Generating/Changing Requirements					
1	7	6	4	3	20
2	26	16	40	32	114
3	1	7	5	6	19
8	0	0	0	1	1
Total	34	29	49	42	154
No. of Personel Assigned to Contractor Oversight					
1	3	4	0	1	8
2	15	7	17	17	56
3	15	15	24	19	73
4	1	3	8	2	14
5	0	0	0	1	1
6	0	0	0	1	1
8	0	0	0	1	1
Total	34	29	49	42	154
Contract Award Time (meets PALT?)					
No	11	15	26	25	77
Yes	23	14	23	17	77
Total	34	29	49	42	154

Management Practice	Service Type D	J	R	S	Total
Documentation (Acquisition Plan) Exists					
No	20	20	30	22	92
Yes	14	9	19	20	62
Total	34	29	49	42	154
Documentation (PW5) Exists					
No					
Yes	12	7	12	11	42
Total	22	22	37	31	112
	34	29	49	42	154
Documentation (Pricing Analysis) Exists					
No	16	13	16	18	63
Yes	18	16	33	24	91
Total	34	29	49	42	154
Documentation (QA Plan) Exists					
No	27	18	22	21	88
Yes	7	11	27	21	66
Total	34	29	49	42	154
Documentation (Closeout Letter) Exists					
No	15	16	20	17	68
Yes	3	2	1	1	7
N/A	16	11	28	24	79
Total	34	29	49	42	154
Documentation (PNM) Exists					
No	19	22	26	18	85
Yes	8	4	18	14	44
N/A	7	3	5	10	25
Total	34	29	49	42	154

Table 5. Chi-Square Hypothesis Testing Results Between the Use of IGE and Contract Cost

Management Practice	Test *p* value	IGE Used? No	Yes	Total
Use of IGEs and Contract's Cost	0.0002			
Under $100K		62	29	91
Over $100K		24	39	63
Total		86	68	154

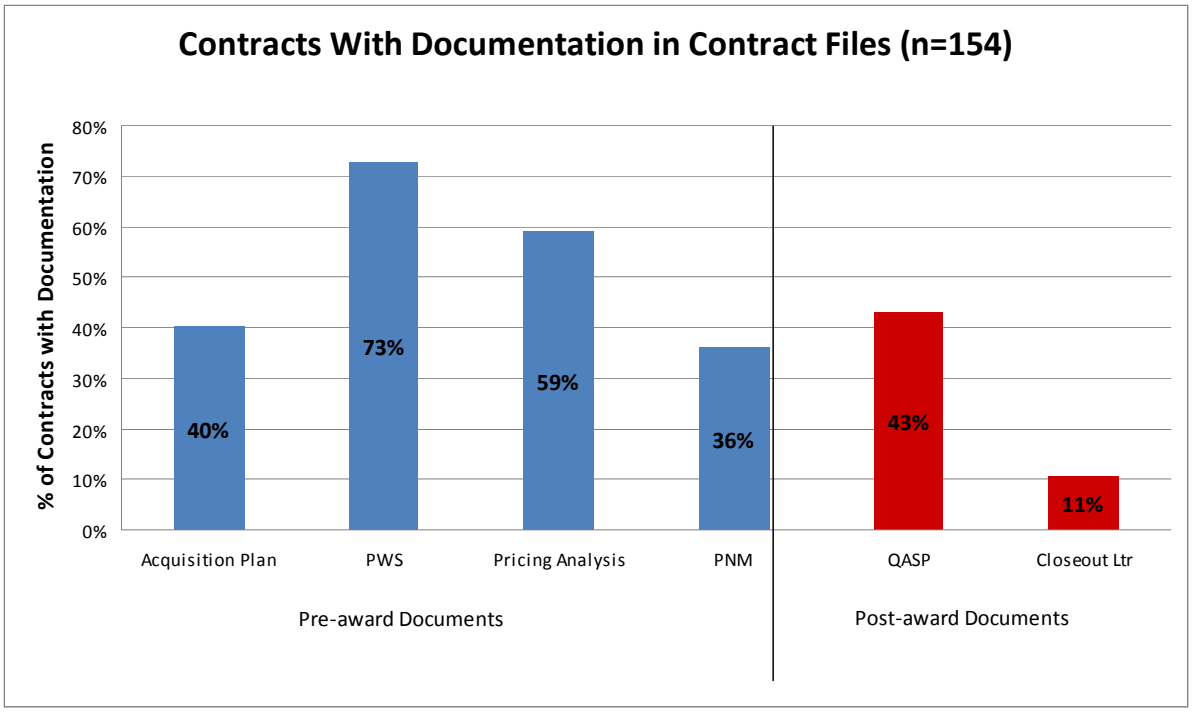

Figure 4. Percentage of Contract File Documents Found in Contract Files

Table 6. FY2010 Service Contracts Awarded

	MICC Office A	MICC Office C	MICC Office D	MICC Office E	MICC Office F	MICC Office G	MICC Office H
Total Dollar Value of Service Contracts Awarded (R, D, S, & J)	$17,435,363	$38,361,394	$931,231,325	$316,000,000	Data Not Available	$293,000,000	$301,000,000
Total Number of Service Contracts Awarded (R, D, S, & J)	76	766	542	226		350	804
Average Dollar Value per Service Contract	$229,413	$50,080	$1,718,138	$1,398,230		$838,000	$374,000

Table 7. Office Capacity of MICC Offices Observed

Capacity Category	Capacity Subcategories	MICC Office A	MICC Office C	MICC Office D	MICC Office E	MICC Office F	MICC Office G	MICC Office H
Billets	Warranted	100%	88%	83%	58%	100%	100%	100%
	Non-warranted	0%	84%	106%	47%	117%	86%	86%
Certification	DAWIA I	23%	13%	23%	8%	0%	2%	0%
	DAWIA II	162%	24%	16%	54%	66%	66%	68%
	DAWIA III	100%	27%	33%	118%	0%	32%	32%
Experience	< 1 year	18%	14%	7%	0%	14%	10%	4%
	1 - 2 years	18%	43%	12%	1%	23%	3%	2%
	2 - 3 years	10%	16%	7%	9%	34%	19%	21%
	> 3 years	55%	17%	74%	90%	29%	68%	73%

Summary, Conclusion, and Recommendations

The purpose of this research was to understand the relationship between service types, contract characteristics, and management practices in order to understand the drivers of acquisition practice and performance. Our three research questions are restated here and summarily answered in the following subsections.

- Do the contract characteristics differ for different types of services?
- Do the types of services being acquired affect the management practices being used?
- Does the capacity for carrying out acquisition-related work affect the management practices being used?

Our research findings suggest a relationship between service type and three contract characteristics and between service type and five management practices, as shown in Figure 5.

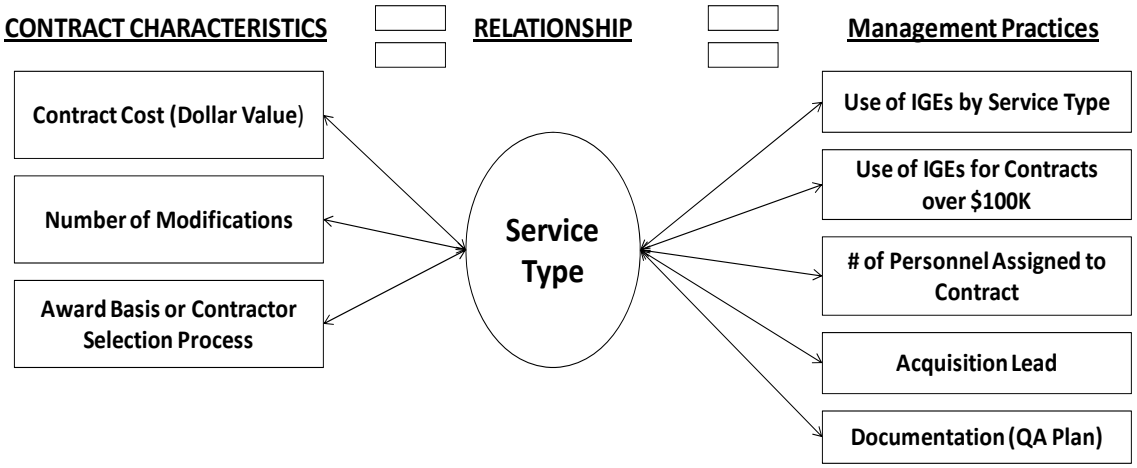

Figure 5. Summary of Findings From Data Analysis

Do the Contract Characteristics Differ for Different Types of Services?

The evaluation of the six contract characteristics revealed a relationship between service type and three of the contract characteristics displayed in Figure 5. Specifically, we found the following results:

- The average annual contract cost for service type S was significantly higher than for the other three service types we evaluated.
- The number of modifications applied to service types R and S were considerably larger than for service types D and J.
- Service types D and J used LPTA contract award strategies approximately 50% of the time, while service types R and S awarded contracts more frequently based on a best value trade-off.

We also observed that every contract was awarded as FFP, only one contract utilized an incentive or award fee, and the use of competition in the solicitation process was not related to service type.

Do the Types of Services Being Acquired Affect the Management Practices Being Used?

The evaluation of the 14 management practices revealed a relationship between service type and five of the management practices, as shown in Figure 5. The findings indicated a relationship between service type and the following management practices:

- In the use of IGEs in contracts for the specific services, we found that over half of the contracts for all service types did not have an IGE. In addition, for the use of an IGE for contracts over the simplified acquisition threshold, only 32% of the contracts did have an IGE.
- The average number of personnel assigned to a contract does have a relationship with service type; specifically, the average number of personnel was high for service types R and S.
- We clearly identified the contracting officer as the acquisition lead for 146 of the 154 contracts we evaluated and the contract specialist as the acquisition lead for the remaining eight contracts.
- The QASP was the only acquisition document that had a relationship with service type. Only 43% of the contracts we evaluated had a QASP in the contract file.

Based on our research findings, it appears that factors other than service type may share a stronger relationship with the management practices, and this indicates a need to further research the topic.

Does the Capacity for Carrying Out Acquisition-Related Work Affect the Management Practices Being Used?

Our research findings suggested that a relationship exists between capacity and management practices. Our findings revealed that offices lacked the requisite number of authorized personnel to perform acquisition functions and a majority of the personnel on hand lacked proper training certifications. On average, these offices handled a significant number of service contracts, and, not factoring in other procurement requirements, the MICC acquisition workforce is managing substantial workloads with minimal personnel.

Our research findings also indicated that although standard practices for managing service contracts were common at all of the MICC offices, most offices did not incorporate a standard contract filing system. Based on contract file reviews, we found that most offices continue to maintain hard-copy contract files, while only one office maintained digital files. Regardless of storage method, contract file documentation was either incomplete or absent from files at all locations.

Recommendations

Our research findings led us to identify several specific recommendations for the U.S. Army MICC for managing contracts for these four specific service types. We recommend that MICC contracting offices take the following actions:

1. Further scrutinize the use of sole-source contracts to ensure that competition requirements are being met and that fair and reasonable prices are being negotiated.
2. Evaluate the process of using IGEs as a tool for ensuring fair and reasonable prices.

3. Explore using contract options or award term incentives in the procurement of recurring services to help streamline the contracting process and reduce the time required to award contracts.
4. Explore the acquisition planning and requirements management processes to identify the cause for the higher level of contract modifications for R- and S-type services. This factor results in an increased burden on the contracting workforce; hence, identifying and eliminating the cause will help lessen this unnecessary burden.
5. Consider using incentive and award fees in future services acquisition. Although using these fees may require additional administration effort on the part of the contracting office, the benefits resulting from higher contractor performance may outweigh the cost of administering the fees.
6. Insist on complete and accurate contract file documentation in the acquisition of services. Federal Acquisition Regulation (FAR) part 4 (2011) provides policy and regulations for contract file documentation that should be used to ensure that government records are maintained appropriately.
7. Adopt a project management approach to the acquisition of services. This approach includes establishing project teams consisting of cross-functional representatives involved in services acquisition. This approach also includes a dedicated project manager to lead the acquisition effort, as well as established roles and responsibilities for each of the project team members.
8. Agencies should focus on increasing the fill rate of acquisition billets within the organization. This will ensure that there are sufficient project managers, contracting officers/specialists, and contracting officer representatives (CORs) available to manage services acquisition.
9. In addition to having filled acquisition billets, emphasis should also be placed on ensuring that acquisition personnel are properly trained, educated, and experienced in their functional specialty areas, such as project management, contracting, and CORs. Agencies should track the acquisition workforce's attainment of the required Defense Acquisition Workforce Improvement Act (DAWIA) certification levels for each specialty area.
10. To maintain a competent and capable workforce, agencies should improve their effort in the recruitment, retention, and professional development of the acquisition workforce.

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