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Market Niches in the Private Military Sector: An Initial Look

Nick Dew

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**Market Niches in the Private Military Sector:
An Initial Look**

24 September 2009

by

Dr. Nicholas Dew, Assistant Professor

Lt. Col. Bryan Hudgens, Lecturer

Graduate School of Business & Public Policy

Naval Postgraduate School

ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

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Abstract

This report presents data drawn from two studies of US-based private military contractors (PMCs), including what we believe is the largest independent survey yet conducted on the Private Military industry. Results from the first study (a structured interview) include the identification of key variables industry managers use to differentiate between firms in the industry, and a simple cognitive model industry participants use to orient themselves in the industry landscape. Key results from the second study include the identification of several important differences between large and small competitors in the industry and identification of the key variables industry managers use when evaluating the qualities of firms with whom they sub-contract. Overall, this study will help professionals who do business with PMCs better understand the nature of the industry.

Keywords: Private military contractors (PMCs), key variables, industry landscape, evaluating, sub-contract.

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Nick Dew is an Assistant Professor of Strategic Management at the Naval Postgraduate School, Monterey, CA. His research focuses on entrepreneurial cognition and industry evolution. He has a Ph.D. and MBA from the University of Virginia. Before entering academia, he spent eight years working internationally in the oil industry. His work has been published in several academic journals, including the *Journal of Marketing*, *Strategic Management Journal*, the *Journal of Business Venturing*, the *Journal of Economic Behavior and Organization,* and *Organization Studies.* His awards include the Louis D. Liskin award for teaching excellence at NPS GSBPP.

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I.   Introduction

In this report, we present our recent research on market niches in the business of private military contractors (PMCs). Past research has posited a number of different schemas for classifying participants in the industry (Singer, 2003; Avant, 2005). In this report we ask: what would constitute a valid and accurate understanding of the industry? Our write-up describes our efforts and conclusions regarding this question. The research questions we focus on are:

1.   What are the distinct niches into which the overall sector is divided? Are perceptions of these niches widely shared?

2.   If so, what are the underlying dimensions on which niches vary? What drives differentiation between players that do business in particular niches?

3.   What might we learn about the structure of competition in different niches and across the sector as a whole?

4.   What might we learn about patterns of cooperation between firms in the sector? When do firms cooperate with each other, and why?

We are hopeful that this work will have practical merit for the professional acquisition community in the DoD. Numerous authorities have called recently for better-informed purchasing policies, particularly with regard to service contracting and, more specifically, the contracting of private security firms (Gansler, 2007; CRS, 2009). This study is designed to help acquisition professionals perform their job tasks better by enabling them to have an even more informed understanding of an important service sector that the DoD (and other US government agencies such as the DoS and the USAid) draws on extensively. Clearly, if the current practice of contracting out a wide variety of support services continues, then the importance and relevance of having a better understanding of the nature of this industry will only deepen in the future.

The research we report here draws on our prior work on the sector (Dew & Hudgens, 2008) and on research techniques developed within strategic management (Porac, Thomas, Wilson, & Paton, 1995) that can help us gain a better understanding of the nature of the sector. In examining the sector, we have drawn extensively on this body of techniques. The report describes the data we gathered and lays out some rudimentary analysis of it. We drew on:

(a)   Structured interviews with 19 industry participants who collectively have over 389 years experience in private military or uniformed service. These interviews generated over 400 transcribed pages of data.

(b)   A comprehensive survey administered to 313 individuals working for firms in the sector that to date has elicited 61 responses. This survey has generated a large body of statistical data.

The report proceeds as follows. Following this brief introduction, the second section explains our research methods: who we interviewed and surveyed, what our interview and survey techniques were, and how we analyzed the data. In the third section, we lay out our initial analysis of the interview data we collected. Section four presents some of the key data we gathered using our survey. A brief conclusion follows.

Readers should note that in writing this technical report, we have put our efforts into explaining our research methods and presenting the data we've collected. The report is therefore "light" on theory, explanation, interpretation and discussion of implications. We think the majority of readers will agree that most of the data speaks for itself, or that they prefer to interpret its meaning themselves.

II. What We Did to Collect Data: Our Research Methodologies

A. Getting Data on the Industry

Because PMCs are a relatively new industry (half the firms are under 13 years old, much of the sector grew up only in the 1990s, and some segments of the industry are even newer) acquisition professionals don't have the informational benefits of a long history of transactions and market activities (unlike aircraft purchasing, for example). Moreover, significant parts of the PM sector are rather secretive, either by policy or because they are small, private firms that are not required to release public information about themselves. In general, it is a tight-lipped industry, protective of information sources, anxious to keep out of the public eye, and shy of investigators (Fainaru, 2007).

Recently, either because of investigative journalism or US government information gathering, more data is becoming available about the industry. Bruneau (2009) points out that there has been an explosion of data available on the industry (compared to pre-2004, for example) owing to US congressional attempts to achieve better oversight of private military contractors working in Iraq, including DoD, USAid and DoS spending on PSCs (private security companies) in Iraq, the number of contractor personnel active, and other important information. As useful as this is in building some basic statistics on the industry, it is not the kind of industry-level information that we have pursued in this study. In fact, our view is that there is no shortage of information available on the topic of PMCs, but there is not enough of the right kinds of data that would tell us much about the way the sector behaves. Therefore, one of our main goals in this study has been simply to collect some data that is useful for the purposes of describing the industry—from people inside it. Essentially, this involves getting industry participants to tell us about their rivalries with other firms, and using this data to build a picture of the market niches and rivalries within the overall PM sector.

We expected data collection to be challenging, and it has lived up to our expectations. In our 2008 project, we collected data based on public information sources (Dew & Hudgens, 2008). The work we report on now involves data collection via structured interviewees and a survey. As with most empirical data, the basic issue is that no one data source will usually suffice. A better research strategy is to use multiple data sources, build in some redundancy, and expect that some data collection efforts will go better than others, i.e., to rely on the portfolio strategy for data collection.

B. Data We Collected in This Study—Why, How, Who

The overall study involves two research methods:

1. A first round of structured interviews with 19 industry insiders (the methodology we have used here enables us to differentiate the market segments within the sector);

2. A second round of a survey instrument directed at a larger group of industry participants (to help identify the structure of competition and collaboration across market segments).

Before we proceed, let us say a word about data confidentiality and how we present the data in this study. University research that involves human subjects can only be undertaken with the approval of human-subjects oversight bodies at those institutions (in our case, at NPS and UC Irvine, where our collaborators on this study resided). We have taken great care to ensure the anonymity of individual respondents and firms in the study. Our goal is to better understand the industry at an aggregate level—not to investigate individual firms—so it makes sense to clean the data of individual and firm identities. Therefore, we do not name individuals or firms we gathered data from anywhere in this study. This is in keeping with the requirements imposed by the human-subjects oversight committees at NPS and UCI, requirements that are designed to protect individuals who contributed information to our study. In a few places we do mention firms by name, but these are instances in which (unidentified) subjects named certain firms as industry

participants. For example, in describing the private security contractor (PSC) niche in the industry, a subject might say that "firms such as Blackwater" participate in that particular niche. In these instances, naming of such firms is no more than "common knowledge" in the industry. Therefore, when we quote from interviewees, we identify the interviewees by interview number only, rather than using the standard practice of identifying the name of the individual and the date of the interview. This, again, is in an effort to protect the anonymity of the participants. In all cases where we refer to firms by name, this does not indicate whether personnel employed by these firms did or did not participate in the study.

Phase 1: The Structured Interviews

For the structured interviews, we drew on research practices that are well established in the field of strategic management, in particular in the work of cognitive researchers who examine how strategic managers think and make sense of the environment their firms work in. Pioneer studies in this field include Reger and Huff (1993) and Porac et al. (1995). We drew both on the underlying theoretical research model of these studies and on the research practices they used. In terms of underlying theory, the basic argument cognitive researchers make is that human beings have bounded, rather than unlimited, cognitive capacity. People, therefore, use a variety of heuristics (rules of thumb) and simplified models (often referred to as mental models) to make the task of understanding a complex industrial landscape more viable. In essence, the argument these researchers make is that people pick out and focus on a few salient dimensions of the wider landscape because it's impossible to efficiently comprehend it all. The goal of the researcher is to discover what these mental models look like. Past research in this tradition argues that there is often a surprising degree of uniformity in industry insider models both because human beings to some extent automatically use the same (obvious) signposts to navigate in an industry and also because managers are socialized into the industry landscape, i.e. they learn from others and by vicarious experience what the industry "looks" like.

The method used for researching insider mental models is structured interviews. The interviewer elicits the subjects' responses to various questions, and asks all subjects the same set of questions about the industry. The responses are then transcribed, and the content is analyzed. See Appendix A for the telephone interview instrument we used in this study, which was modeled on the research instrument used by Porac et al. (1995), and Appendix B for excerpts from the interview transcripts.

Interview subjects are industry insiders that are chosen based on the assumption that they are "expert witnesses" in the industry (Reger & Huff, 1993). The expert witness criterion is key because it would not be useful to assemble data on the mental models of industry novices. It takes time to learn and be socialized into industries, to understand the vocabulary and recipes of the industry. Hence, tenure in the industry is an important criterion for interviewees. The longer, the better. In this study, our 19 subjects had on average over 20 years of combined experience as private military contractors and in uniformed military service, which more than meets the expert-witness criteria. The sample was drawn from a variety of sources, mostly public, and supplemented by network contacts obtained via NPS faculty and students. Details of the sample are in Table 1 below:

Table 1.   Interviewee Data

	Interview #	# of Pages Transcribed	Job Title	Total Industry Experience (years)	Prior Uniformed Military Experience (years)
11	12-22-08 2 p.m.	18	Director	16	None
22	12-22-08 4 p.m.	17	Senior VP	20	14 (Marines)
33	12-22-08 9 a.m.	32	Senior Director	11	None
44	12-15-08 9 a.m.	18	CEO	21	(Army)
55	11-21-08 8:30 a.m.	17	Principal/CEO	15	None
66	11-25-08 8 a.m.	23	Director	6	None
77	2-28-09 6 a.m.	20	Contracts Manager	23	None
88	12-02-08 8:30 a.m.	27	Senior Director	20	(Police and Army)
99	12-12-08 2pm p.m.	29	Director	23	20 (Navy)
110	3-31-09	21	Senior VP	40	25 (Army)
111	3-19-09	31	Executive VP and CTO	20	10 (Army)
112	12-30-08 8 a.m.	14	President	14	12 (Navy, some Army)
113	12-30-08 10 a.m.	39	Business Developer	35	30 (Army)
114	2-05-09 730 a.m.	22	President	8	None
115	1-23-09 1pm	10	Senior VP	15	None
116	1-27-09	19	VP	2	None
117	3-16-09	19	Senior Security Coordinator	18	8 (Marines)
118	4-4-09	21	Director	42	32 (Army)
119	4-8-09	17	Program Manager	40	30 (Air Force)
	Total	**414**	**Total**	**389 years**	
			Average	**20.5 years**	

Phase 2: The Survey

Survey research is used widely across all the social sciences to investigate phenomena, with varying degrees of effectiveness. The survey we used in this study essentially aimed to collect information on five things:

1. Demographic data that described each firm, such as its size, the prior experience of its employees, etc.
   - This generates information about the size distribution of firms in the industry.

2. Data on the market niches in which firms are active, i.e., what kinds of work they generally undertake, for whom, and where.
   - This generates information about the general shape of activities in the industry to better describe the characteristic activities in the industry.

3. Who firms think their competitors are.
   - This allows us to map the competitive networks that exist in the industry.

4. Who firms like to cooperate with, and who they wouldn't work with, i.e., their "in" and "out" networks.
   - This allows us to map the patterns of group affiliations that exist in the industry and where the break-lines are between groups of firms.

5. Why firms do or do not like working with other firms.
   - Differences between these answers allow us to understand what drives the patterns of cooperation that are exhibited.

A copy of the survey instrument we used is provided in Appendix C**.**

The sample of firms we surveyed was drawn from our prior work on the demographics of the industry (Dew & Hudgens, 2008). In that study, we identified approximately 550 named firms, about half of which were US based, and built a database of information on these firms. In many cases, this data included information such as the names of key personnel in the firms including the founders or the CEO. We drew on this list and supplemented it where necessary. All of the

firms we surveyed in this study were US-based. In some cases, we sent surveys to multiple subjects at the same firm in order to increase the likelihood that we would garner information on the firm from a subject.

We used two methods to distribute the survey. Our first distribution wave involved hand delivering surveys to approximately 30 firms in northern Virginia (the greater Washington, DC area). Many private military contractors have offices in this area because of proximity to their key customers: various branches of the United States Federal Government. Respondents were given a prepaid envelop in which to return the survey by mail. In the second wave, we distributed surveys by mail. A third smaller wave involved another round of mail distribution to the remaining firms for which we were able to obtain mailing addresses and contact information. This included new firms that were named in survey responses we received. We added these firms to our mailing list.

In total we distributed 311 surveys. We received 61 responses at the time of writing this report, a response rate of 20%, which is within the normal range of response rates for survey research among organizations.

C.   Analysis Techniques Used

We used a mix of qualitative and quantitative methodologies to examine the data we collected.

It is worth mentioning that the analysis we report here is preliminary—it is based on our initial look at the data, and we have not yet "mined" the data extensively for its deeper patterns. However, our general philosophy about data analysis is that obvious patterns should speak out without having to manipulate the data extensively. Therefore, what we report here are the obvious patterns and relationships we found in the data, and we expect these will probably remain the most robust findings even after (a) we collect a larger sample of surveys, which we expect to do by the end of October, and (b) we have had time to more extensively

examine the data for its deeper patterns and relationships, which we expect to do in preparation for an academic paper based on this study.

The Qualitative Analysis

➢ We started by reading all the transcripts and marking them up with their noticeable features. Three of us performed this task, and we then shared our insights—a form of triangulation.

➢ The information we distilled was used to populate several tables that we will present in the next section of the paper. For example, we distilled the information collected from the interviewees on the category labels, which they had used to describe market niches in the industry, into a set of basic dimensions that described how firms vary in the private military sector. Many of the category labels were based on the operational aspects of the industry. Thus, we are able to present an "insider" view of niches in the industry based on their operational characteristics. In addition, subjects described non-operational dimensions of firms, such as in which "end" of the market they are positioned, and factors that describe firms' personalities, characters and identities. Our process for collapsing the taxonomies that subjects described into a smaller set, which we present in the data tables that follow, was iterative—we looked for synonyms that subjects used to describe elements of the industry and kept collapsing these until we reached a smaller number of dimensions that were unique, i.e., that could not be further collapsed.

➢ In some cases, interviewees also populated the niches with a list of firms that participate in them. When more than one interviewee gave a list of firms that were characteristic of a niche, we were able to triangulate the names. We used this data to inform some analysis of networks in the industry, and also to triangulate against some of the survey data we collected.

Survey Data Analysis

➢ We first entered all the survey data into an online survey instrument (SurveyMonkeyPro). We then downloaded the data into a spreadsheet format and analyzed some basic relationships between the responses. We used multivariate regression to test various relationships that we conjectured might exist within the industry. Because we are still at this stage of our analysis, it is still very preliminary, involving looking for straightforward relationships that "speak for themselves" in the survey data.

III. Data Presentation: Interview Data

A. Operational Segments Identified

Research on managerial cognition strongly suggests that strategic managers have a fairly small repertoire of cognitive heuristics (rules of thumb) that they use to navigate an industry (Porac et al., 1995). This finding is in contrast to the assumptions generally made in fields such as economics, which tend to take a much stronger view of human rationality, which, in turn, has implications for the information search and scanning behaviors expected of strategic managers (Forbes, 2007). Cognitive researchers argue that perceptual and economic factors usually reinforce each other, with the perceptual factors driving what is deemed as economically relevant in an industry (Reger & Huff, 1993). In a series of papers, Porac and his colleagues did analysis that suggests that managers use four commonsense dimensions to categorize their rivals in an industry:

1. Type of products and services sold,

    a. Are they selling the same stuff as us; i.e., are they in our selling "space"?

2. Size

    a. Small/medium/large; these distinctions are not very fine-grained and tend to be relative to one another, rather than an absolute measure.

3. Location/geography

    a. Where are they from? Are they from the same place as us, or are they different? Firms are expected to be fairly "local" and myopic in their assessments.

4. Type of technology or "production" methods used

    a. For some industries this means the nature of the production methods firms use. An example would be high/low quality manufacturing, based on the production method. This largely defines the kinds of market niches in which a firm can sell.

Based on data we gathered from experts in the field, we created a series of PMC industry classifications that largely bear out the findings of prior research. Our results are summarized in Table 2. The majority of respondents in this study agreed that contrary to the public's perception of PMCs inhabiting an industry of headline-grabbing, machine-gun-toting firms, the vast majority of companies active in this industry, 80%-90%, are involved in some form of logistics support (often used as an umbrella term for activities that are not inherently security related). Respondents generally saw the remaining 10%-20% of the industry as divided between training and security provision. These categories are further divided into sub-categories, as outlined in Table 2.

Table 2.   Summary of Operational Segments

	Category	Sub-categorization	Examples
"Inherently military" skills and capabilities required	Security	1. Static (slow) 2. Moving (fast) - PSD - convoy 3. EOD protection 4. Risk assessment/consulting 5. Canine/dogs 6. Combat medical	Triple Canopy and Blackwater are commonly cited examples
	Training, education, advisory and mentoring	1. Strategic 2. Tactical 3. Operational 4. Advisory: reconstruction – stabilization	MPRI and DynCorp are commonly cited
	Intelligence analysis	"DoD is producing all this data that needs analyzing—they don't have the resources/capability for that."	SAIC is *the* example
	EOD	1. Munitions destruction 2. De-mining	EODTech is a clear example
"Non-inherently military" skills and capabilities required; skills and capabilities are shared with similar civilian operations	Logistics	Epitomized in the LOGCAP contracts between DoD and KBR	KBR is *the* example
	Base ops	Large- and small-scale facilities management, including austere and unfriendly environments	KBR is *the* example
	Maintenance	Maintenance of weapon systems, aircraft platforms, ground equipment, and facilities	Defense Support Services LLC (DS2)
	Construction	Building facilities	"CH2M Hill gets big things built."

As they described segments of the industry, interviewees often named various firms that they saw as typical of the sector, sometimes even listing names of

firms that represented their perceived "players" in a particular segment. We collated this data and exhibit it in Table 3. In the security segment, more than one participant clearly called out the names of the key firms participating in the segment.

Table 3.   Defined Clusters of Participants

Segment	Participants*
Security	**Blackwater**, Triple C, EODTech, DynCorp, SOC-SMG, Aegis, Reed, Olive, ArmorGroup
EOD	**EODTech**, Ronco, DynCorp, Tetratech, ArmorGroup, UXB, EDO.
Advisory, training, reconstruction-stabilization	**MPRI**, with DynCorp trying to reposition themselves mainly into this segment; PAE, Cubic; to some extent SAIC, Blacwater, Triple Canopy, Raytheon.
Logistics	**KBR**, Agility, DynCorp (emerging LOGCAP provider)
Base operations	**KBR**, Agility, PAE, AECOM
Aviation	Skylink, DynCorp, Evergreen Air, Airscan, Coldwater

* Bolded names are firms that seem to define the segment.

Two observations are worth making regarding the data presented in Table 3. First, there are defining firms in each niche/segment. Certain firms are regarded as exemplars that "own" the territory in particular segments, presumably because of their market share, quality leadership, or media attention. These are the "go to" firms in the segment. Examples include MPRI for advisory services, SAIC for intelligence analysis, KBR for logistics and base support, and Blackwater for security. (Note that for some segments, we have not yet figured out which is the defining firm based on the data we have). In this respect, the PMC sector, like any other industry, has its Kleenex (brand that defines tissues) and Coca Cola (brand that defines cola drinks) firms. One might say that this is just the way in which human cognition and industries intersect: human cognitive processes involve typifying an industry according to its segment leaders. This doesn't mean that these firms *actually* are the quality or market-share leaders in a segment, but the ways

managers use heuristic shortcuts to segment an industry might make it *seem* as though that is the case.

Secondly, there is the issue of celebrity firms in the PMC sector—or, one might say, infamous firms. According to Rindova, Pollock, and Hayward (2006), "[F]irm celebrity arises as the media search for firms that serve as vivid examples of important changes in industries and society in general" (p. 52). The firm that the US media picked up was Blackwater, which has at various times—and among various audiences—been lauded or damned. Blackwater is interesting in part because it has become a defining firm not just for the security niche in the PMC sector, but for the whole sector. It was the firm most mentioned by subjects in our study as they talked about the industry. It is different from the other firms in that interviewees seemed to consider it an "ideal type" by which to define what other firms are and aren't.

B.   Other Industry Dimensions

Scale and Scope: "Anything needed to run a small city"

As some of our respondents were quick to point out, private logistics firms have been part of the military landscape from Valley Forge to Napoleon to the World Wars to Vietnam. As highlighted by Porac et al., a standard way of differentiating among firms in a sector is size; this point came out nicely among our interviewees, who often differentiated among firms based on their role as "big guys" or "small guys." The "big guys" include KBR, Agility and PA&E (recently acquired by Lockheed Martin), while the "small guys" include Exploration Logistics, The Development Initiative, or Coldwater Aviation. Table 4 provides a summary of this and other non-operational ways of classifying the industry.

Based on what subjects said, large and small contractors purportedly rely on different factors to survive in the sector. Small contractors in this field rely heavily on their reputations and contact networks in order to get business (Interview 12-30-08). (In the words of one interviewee "We depend very much on a network of contacts.") Another interviewee pointed out, "Well, at our heart we are a human capital

company. We have to go find tools, specific tools and talents to perform specific jobs. So, word of mouth and networks are extremely important to us to be able to find those people."

Another said:

> And then contact network—one of the things that we do really well—has been a distinguishing factor for us—is our ability to recruit the right kind of people to do the work. Some of the larger defense contractors, we get into this space—[your Lockheed and your Raytheon?]—don't always have the right kind of resources to recruit, make sure you're selecting the right kind of individuals to do this work.

Though they cannot necessarily build a city for their client overnight, the strengths of the "little guys" lies in their flexibility as well as their specificity. They most often see themselves—and sell themselves—as best able to cater to client needs such as saving them money in the long-run. This is not the case for bigger contractors who seem to rely on different factors to compete. Big contractors were differentiated by their proven ability to get large, complex jobs done. Their experience in contract management also leads them to more often turn around to smaller, often local, subcontractors to execute the specific portion of those contracts. This gives them a broad international reach and access to talent worldwide. Sometimes these employees will follow the company from contract to contract and country to country, creating deep institutional memory as well as access to workers who have lower salary requirements than their American counterparts (Interview 1-19-09). This international hiring pool gives such firms an advantage when it comes to competitiveness in bidding for contracts. According to one interviewee, "It really boils down to most of the cost in this business is labor, so the real challenge is to be able to attract good talent that can manage and do the work you want them to do, but yet at a fairly low price. In other words, keep the labor costs down" (Interview 4-5-09).

Another edge that large firms have is liquidity. One interviewee remarked that:

[O]bviously, being big gives you the ability to financially support yourself. One of the things in dealing with the US government is that they don't pay on time, so there is many–a-time that companies actually float bills for the government. Being larger obviously gives you a better cash-flow position or revolving line of credit, depending on how you're doing it, versus a smaller company where sometimes they can't afford that.

For the time being, interviewees see an apparent edge for larger companies in the logistics/support field. However, this edge is not absolute. One respondent went to great lengths to point out that the firm KBR actually enjoyed a good reputation until they started hiring local contractors to build the facilities (in this case, showers), which broke down over time and started to electrocute US Service men and women. Such incidents represent a threat to even large firms when competing for future contracts. Another interviewee chimed in:

“Do you want to know the worst thing in this job? [...] TCN [Third Country National] management. That will send a contract… that will destroy you. Because often times you are using an in-country recruiter and then all of a sudden… show up all of these guys who… don't speak English or have Hepatitis. (Interview 11-25-08)

Sometimes this can also lead to problems within the companies and between employees. Some of the earliest whistle-blowers on KBR were not necessarily employees motivated by righteous indignation at company practices; instead, they were employees disgruntled by their treatment by TCN managers (Interview 2-09-09). Another interviewee told us that: “They have bad attitude; they have bad morale. I have seen just…there are lots of companies that have been sunk on contracts because of TCN management.”

Personality: From “Real Companies” to “Two Guys with a Fax Machine”

Similarly to logistics, there are large companies and small companies in the security domain. Some security companies have thousands of employees but limited capabilities abroad, while some companies are small, highly specialized, and able to operate professionally in their particular niche, such as maritime security or personal protection services worldwide.

One factor that most respondents deemed important was the background of the company founder or corporate officers. This finding regarding organizational personality was one of the strongest findings we emerged with from the interview portion of our study. According to one interviewee:

> each firm has a personality. That sounds funny but working with each firm is different, and I suppose the personality flows down from their senior management and how they want to do contractual relationships with employees, how they handle customers, and what is the type of work they are willing to go after. (Interview 11-25-08)

Another said,

> Corporate culture is always driven by leadership. […] I would say that really the key is that the leadership within the organization define and pushes down through the management structure how they want that organization to be perceived and the level of professionalism that they want that organization to operate under.

Executives from the firms surveyed in this project held a range of experience from Naval service to Army Special Forces to backgrounds in insurance and industry. Corporate officers' backgrounds significantly affect how they do business. Leadership backgrounds contribute to differentiations in the field by creating recruiting networks for companies, heavily influencing the type of employees that work for each company as well as short- to medium-term recruiting prospects. As one interviewee put it,

> Well, they're all the same in [that] they're getting [the same] money. But aside from that, there are all sorts of various models, especially among those companies and what they personally can do and think they're about, and their ethos. Between a DynCorp and ArmorCorp, an Aegis or a Blackwater— under an assumed name these days—or Triple Canopy, they all have a slightly different take and ethos…which kind of colors its approach to the various topics… So the character and flavor of their employee base pretty much affected how they would approach the various problems.

In the minds of some respondents, founder background also has an influence on who is willing to hire a firm, with more than one respondent lamenting that

European customers tend to shy away from hiring American companies for security work (Interview 12-15-08).

Quality: The "Race to the Bottom"

As in the logistics field, employee pay in security-oriented firms also served in the study as a key indicator of the status of a firm.   Many respondents pointed to "Cadillac" firms like Blackwater or Triple Canopy, which hire many of their operators from groups like the elite US Navy SEALs or the Army "Delta Force." According to one interviewee, "It is the business model. We sell ourselves—because we don't advertise or do that sort of thing—we sell ourselves on our reputation"   Such high-end firms can be juxtaposed against firms such as Wackenhut or Securiguard that will hire "anyone off the street" to train in-house and then stand in front of buildings as low-end, static security. Interviewees pointed to an important link between corporate leadership and quality, particularly in terms of maintaining discipline among contractors. One told us,

> You've heard the cowboy mentality that goes on at some of these locations… There are stories that go on and on about—well, you know… people get out of control. We don't tolerate that… And that comes right direct from the people who run the company and how it filters down…. It's strictly management. The employees are going to do what management will let them, or kind of if they turn their back like they don't care—"boys will be boys" attitude. That's where that problem comes in.

Another interviewee stated a basic difference of principle between how private firms handle "bad behavior" by employees through contractual mechanisms versus other control mechanisms such as the law or professional norms:

> When a serious violation (violation of General Order #1, unethical behavior, violation of company or USG policy) occurs involving one of our personnel, the person will be on the next plane out of there and disciplinary actions taken. There is no tolerance for bad behavior. In the case of minor infractions and personal performance issues, our program manager and team leaders will counsel the individual and monitor corrective actions. If the lack of performance or bad behavior continues, the person is replaced.

Though interviewees thought it easy to differentiate between "high end" and "low end" security companies, within these firms there are significant cost pressures working at odds with firms' cultures. Competitive bidding environments force firms to offer lower and lower wages, making staffing along their traditional networks more difficult. Paying low gives some firms an edge in bidding for contracts but also drives employee turnover at those same firms' up as high as 300% annually (Interview 12-12-08). As one interviewee remarked, "a guy may work for Blackwater one week, and he may work for Triple Canopy the next week, and he may work for me the week after" This is driving the quality of service that many of these companies can offer downward. One interviewee complained,

> the government has managed to drive the wages down so far now that the military sort of guys that were going over there originally are like, "It's not worth my life anymore." So, companies now have to go and find the sheriff from middle Georgia who worked in the sheriff's department there for two years. Now he's over in Iraq carrying an automatic weapon and guarding convoys with no real background in it. (Interview 12-15-08)

For a summary of industry dimensions, see Table 4.

Table 4: Summary of Other Industry Dimensions

Variable Dimension	Sub-dimension	Definition	Examples
Personality	Organization culture; "the firms have particular personalities"	Senior mgt; driven top down; are very important; ideology subscribed to; operating philosophy subscribed to The "core mentality" of the organization	MPRI is an army organization Triple Canopy is a Delta Force organization BW = founded on Seals mentality MVM = law enforcement-based—has different philosophy (defensive) than military-based firms (offensive)
	Profile	High profile vs. low profile 1. Backgrounders and Foregrounders 2. low or high risk taking 3. type of operations undertaken (on the edge, or not) 4. kind of equipment used 5. offensive/defensive 6. to some extent, size	Blackwater = a *celebrity* firm BW = "whole army" Backgrounders serve the clients mission; foregrounders end up driving the mission Blackwater has become a foregrounder; our interviewee thought this unprofessional
Quality	Market "end"	High end/low end Driven by training, ability, discipline, vetting, leadership, capability, equipment and budgets	High end = Triple Canopy, BW, Hart, Dyncorp, Lockheed, L3, GD, NG, SAIC, and BAe Low end = Crescent Security, CACI, Mantech, CSC
	Professionalism	In effect, refers to the professionalism of the individuals employed by the firm—hence to their hiring/vetting standards - Also leadership experience - Also organizational ethics	
	Competency	Whether or not the firm subscribes to standard/high quality TTPs (Tactics, techniques and procedures), i.e., has good rules in place	Custer Battles = ex of one that didn't
Scale & Scope	Size	From large corporations to small mom & pop shops—2 guys and a fax machine	From Wackenhut and G4S to mom & pop outfits rely on "ole' boy's" network
	Local/Intl	Country of origin: UK, US, S. Africa, other international corporate forms vs. local subcontractors	
	Generalists vs. specialists	Generalists (diversified) vs. Specialists (focused)	Soup-to-nuts firms vs. firms that focus on thing. Examples are DynCorp (soup-to-nuts) and Triple Canopy (focused).

C.   Sector Trends

Both large and small firms see labor costs as driving future vertical integration in the field. Many see work becoming more scarce with the withdrawal of US Troops from Iraq. Small firms hope to tackle this issue through further specialization in niche markets while large firms are seeking to overcome this by competing on cost. Where the small firms might struggle to contain labor costs, it will give a competitive edge to larger companies with proven track-records and global reach. Those companies, however, face numerous problems in leveraging these advantages when it comes to quality control. This indicates that reputation for competency is important, especially to small firms.

The decreasing number of highly qualified individuals who are willing to work at the going rates in austere environments—combined with a declining number of contracts that call for high-end armed security—is eating away at the differentiations among security firms that emerged in 2003. Our interviewees suggested doubts at the sustainability of high-end firms—such firms are unlikely to compete to provide security guards for government buildings in the United States, but their niches in Iraq and elsewhere are drying up. These firms will be forced to adapt or be run out of the field altogether. Most importantly, these changes place stress on traditional recruiting networks and cultures in existing firms to conform to the new needs of the market.   Such difficulties may in part explain the sideways moves by firms such as Triple Canopy into training and advisory services.

These training and advisory services can be classified into tactical, operational, and strategic levels of training. Tactical training could be something as simple as teaching soldiers and sailors how to use handguns before their deployments or teaching evasive driving for people working in conflict areas. Operational training could consist of conducting tabletop or full operational exercises, testing security procedures for departments and firms and bringing them up to speed. Strategic training involves designing doctrine, full security plans, or even entire government ministries.   Companies competing in the strategic realm are

heavily invested in human capital. Interviewees suggested firms such as CACI, Booz Allen Hamilton, and MPRI are key players in this field. These firms develop a certain kind of employee: a type of person who will, as one interviewee put it, "be able to go in to a ministry and operate with the minister and some of his senior subordinates" (Interview 12-30-08 10am). This type of company is heavily dependent on existing networks in both governments and the military establishment to garner business.

Some interviewee comments suggested that while strategic-training companies offer governments the ability to buy years of security experience, the future of this model is in question. One informant warned of impending problems with the system: "As the military gets a little smaller and this crowd of folks reaches their ultimate retirement, where are (the companies) getting the feed to keep them running?" (Interview 4-1-09). These firms now face the problem of finding a way to replicate the success they have had with their human resources and contact networks thus far. Many firms are looking to expand into humanitarian fields or with corporate preparedness, but thus far, such jobs make up a miniscule percentage of these firms' current client portfolio. However, interviewees seemed generally confident that training is a growth industry since there will most likely always be a need to improve the performance of everyone from soldiers to bureaucrats to NGO workers both during and after conflicts, disasters, and other complex emergencies in which these firms specialize.

D.   Standing Back: Uncovering an Implicit Model for Niches in the PMC Sector

As mentioned earlier, cognitive research in strategic management has focused on managers' perceptions of their industry with a key part of their work being directed at understanding the cognitive simplifications managers make in order to "organize" complex industry environments (Porac et al., 1995; Reger & Huff, 1993). The key point here is that people use shortcuts and that researchers may therefore learn something from examining the nature of these shortcuts. With this in

mind, one of the analyses we did was based on tracking the dichotomies that subjects expressed in their comments about the industry, exhibited in Table 5. These dichotomies are informative because cognitive theorists have argued that they are one of the key simplifications human beings use to organize their perceptions. Typical examples of dichotomies would be good/bad, tall/short, or smart/stupid.

Table 5.   Selected Dichotomies Expressed by Interviewees

	Inherently Military	**Inherently Civilian**
Armed	Guns	No guns
Perspective viz "spear"	Front end	Back end
Typifying activity	Security (PSCs)	Logistics (support services)
Size	Small	Big
Specialization	Specialists	Generalists
Global	International (ex-pat basis)	Local/TCN basis
Illustrative firm	Blackwater	KBR

What we see in Table 5 is a few of the dichotomies that were mentioned. We chose these ones to illustrate the mapping of the industry because they are highly correlated dichotomies, i.e., subjects make generalizations about the nature of firms in the industry using a cluster of variables. Based on interviewee remarks, one could easily think that they cognitively orient themselves in the industry based on two key landmarks in the environment: Blackwater and KBR. As Figure 1 illustrates, these firms are largely dichotomous—they may be considered to be at either ends of a spectrum:

Figure 1.   Cognitive landmarks in the PM industry

What cognitive analysis suggests is that in the process of simplifying their environment to make it more navigable, strategic managers group or cluster firms

around common features or defining firms in the environment. Blackwater and KBR seem to represent the "hubs" for such clustering. Therefore, at the simplest level, our analysis suggests that industry participants organize the industry according to how much firms resemble KBR or Blackwater.

Readers should note that we are not arguing that PMC managers only view firms with respect to how similar or dissimilar they are to KBR or Blackwater. Cognitive processes involve both simplification and elaboration. Elaboration involves filling in the details that are missed by key simplifications, usually in ways that are at least consistent with the simplification the observer has in mind. Therefore, one should fully expect that PMC managers will cognitively elaborate the underlying signposts they use to navigate the industry, and, therefore, speak with great sophistication about their industry environment. Nonetheless, whatever fleshing out (elaboration) they do rests on the bare bones (simplification) of the underlying industry model they have in mind.

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IV. Data Presentation: The Survey Data

A.   Firm Size and Its Correlates

The data in this section draws initially from questions 3, 4 and 7 in the survey, representing different measures of firm size. In order to capture the size of firms in a way that a) elicits responses from firms concerned about privacy, and b) does so in a less taxing way for respondents, we created three variables for firm "magnitude" on a 1-5 scale. These variables are for Permanent Employees, Contract Employees, and Firm Revenue respectively. Figure 2 exhibits descriptive data regarding the revenue ranges indicated by survey respondents.
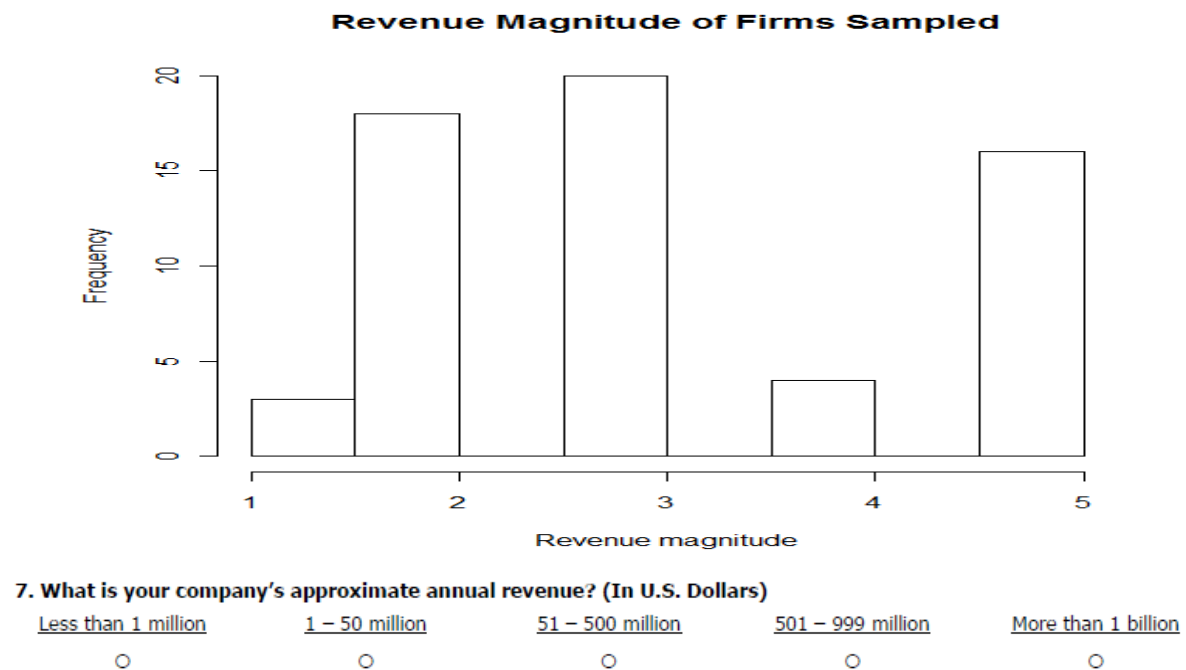
Figure 2.   Revenue Magnitude of Firms Sampled

We then correlated this data with the data we collected from the same firms on the number of permanent (p) and contract (c) employees, and also with a number of other variables we collected data on. The correlations for this data are exhibited in Table 6.

Table 6   Revenue by Firm Characteristics

	Revenue
P. Employees	0.755
C. Employees	0.179
Training	-0.338
Intel	0.072
Logistcs/Transp.	0.131
Baseops	0.051
Security Dets	-0.106
Maint.	0.237
Construction	0.185
EOD	-0.035
Medical	-0.146
Legal	0.009
Aviation	0.282

The data indicates that revenues are strongly correlated with the number of permanent employees in firms (0.755, highlighted in yellow). By contrast, use of contract employees was weakly correlated with both revenue (0.179) and also with permanent employees (0.159). This indicates that use of contractors is largely independent of other indicators of firm size, which gives this variable some value for exploring aspects of a firm that aren't predicted by size per se.

Other data are also interesting in Table 6. In fact, as we will later, if one looks closely, there is a positive relationship between most variables and firm size. This corroborates interview respondents' descriptions of a field with an increasing number of vertically integrated companies with multiple capabilities, bidding for contracts across the spectrum. From Table 6 we see that size is positively correlated with

PMCs that do business in the maintenance, aviation, construction and logistics niche (i.e., firms that participate in these sectors tend to be bigger). In contrast, training is (quite strongly) negatively correlated, indicating that firms that are training oriented tend to be smaller.

Size also seems to matter when it comes to global reach. In Table 7, we see that in nearly every instance, operations outside the US were positively correlated with our size measures. This is logical and should come as no surprise. One interesting area, though, relates to operations in Africa, which is most strongly correlated with the number of contract workers and most weakly correlated with revenue as well as in the lower third for number of permanent employees. This seems to indicate Africa is a niche market now. Further investigation here would tell us more about the types of firms operating there and how this niche is developing.

Table 7.   Revenue by Area of Operation

	Revenue	Perm. Emp	C.Emp
opsUS	-0.153	-0.141	-0.171
opsEurope	0.296	0.132	0.178
opsME	0.309	0.305	0.220
opsSA	0.271	0.232	-0.009
opsAsia	0.539	0.411	0.280
opsAfrica	0.091	0.150	0.369
opsLAm	0.180	0.108	0.073

Figure 3 shows the mean scores for areas of operation. For this figure, a score of 5 indicates that the firm works exclusively in the US; 4 indicates mainly US; 1 indicates "None," i.e., not part of their business. 11% (7 of 61) of survey respondents worked exclusively in the US. 80% said their operations were mainly US based.
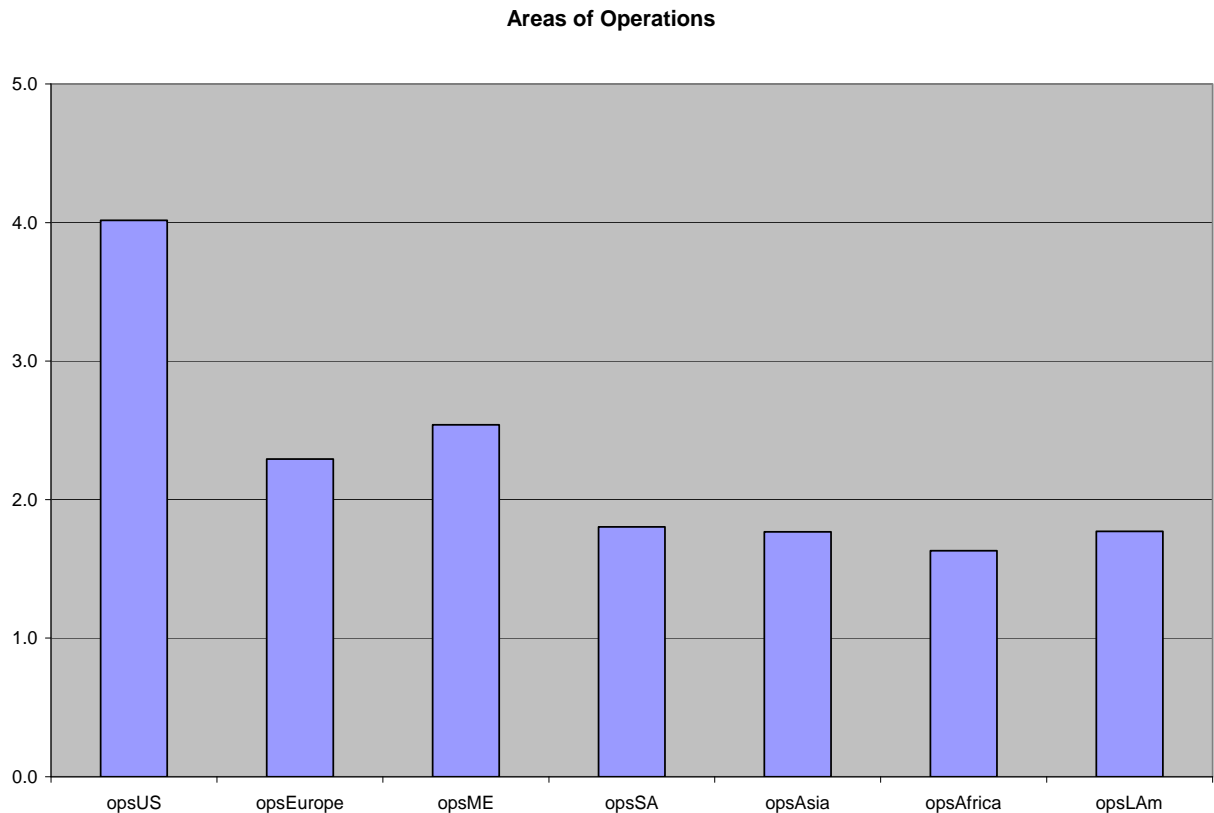
Figure 3.   Areas of Operations

When looking at who firms hire, there is a strong hint that the larger the firm, the further they branch out from the stylized PSCs often highlighted in the media to firms with a global reach, hiring and offering a broader array of services than the "military inc." idea suggests. First, hiring employees with military, special operations, or law enforcement experience takes on less importance as firms get larger (see the correlation data in Table 8, which shows that these factors are negatively correlated with size). As the firms analyzed in this study grow, they tend to hire for a variety of different missions. Smaller firms seem to focus more on niches such as EOD, medical, or training and seem to limit their hiring appropriately.

Table 8.   Revenue by Who Firms Hire

	Revenue
Military Experience	-0.113
Spec Ops Experience	-0.248
Law Enforcement Exp	-0.249
Intelligence Exp	0.109
Legal Exp	-0.056
IN-house Training	-0.056
Recruit US	-0.317
Recruit Europe	0.479
Recruit Middle East	0.511
Recruit South Asia	0.562
Recruit Asia/Pacific	0.498
Recruit Africa	0.161
Recruit Latin America	0.068

Secondly, Table 8 also shows that *where* firms hire employees from changes with size. Hiring US employees is negatively correlated with size—as firms get larger, they hire more internationally. This data is completely consistent with our interview data, in which TCN hiring practices (and the problems therein) were highlighted by participants. However, overall, as Figure 4 shows, the hiring practices of US PMCs remain strongly US biased (note—a score of 1 on the survey indicates that a firm does not hire any employees from that region).

Regions that firms recruit employees from
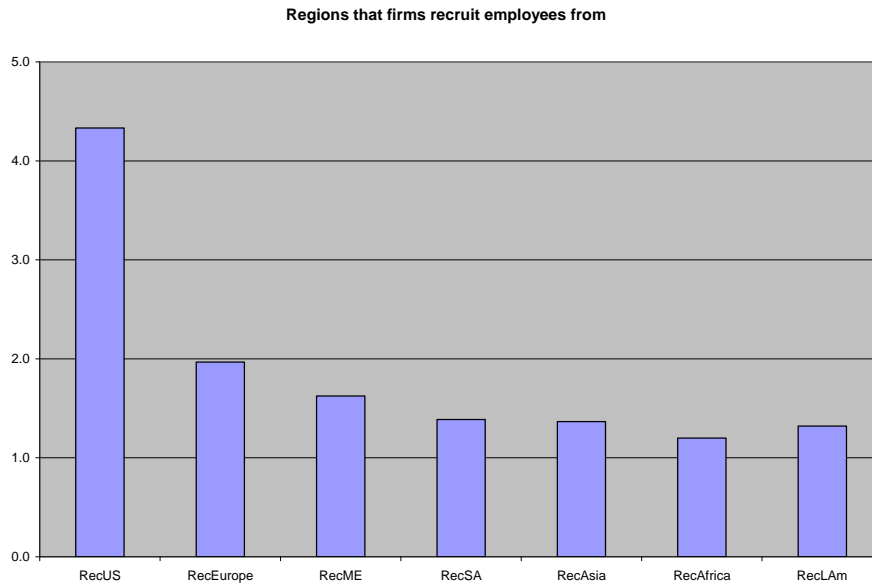
Figure 4. Regions that Firms Recruit Employees From

Table 9 shows the relationship between firm size and who their customers are. This data comes from question 8 in the survey. The picture here is that as firm size increases, the likelihood that the firm does business with the big US agencies, NATO, NGOs and non–US-government agencies also increases. This data should come as no surprise and, in fact, might be considered an indication that our survey responses are generally sound. Of course, as size decreases it is more likely that firms are working for private citizens.

Table 9.   Size and Who They Work For

	permEmp	Revenue
WFDoD	0.170	0.278
WFDoS	-0.038	-0.108
WFUSAID	0.312	0.285
WFoUS	-0.110	-0.195
WFStates	0.185	0.103
WFnonUSG	0.073	0.297
Wfcorps	-0.022	0.082
WFpvtctzn	-0.271	-0.204
WFUN	0.048	0.174
WFNATO	0.245	0.258
WFNGO	0.186	0.254

B.   Customers that Firms Service

Data on the customers that firms direct their services to came from question 8 in the survey. Figure 5 shows the raw scores for survey respondents.

Customers firms direct their services to
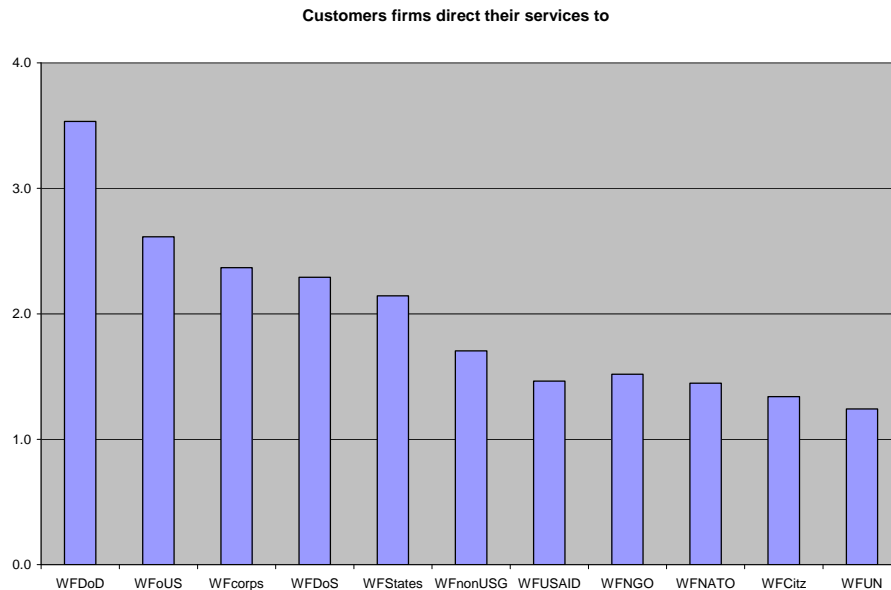
Figure 5.   Customers Firms Direct Their Services To

In this chart, a score of 1 indicates that firms do none of their business with these customers, and 5 indicates they work exclusively for them. Therefore, the low scores for "work for private citizens" and "work for the UN" tell a story about who is generally not in the client base of firms in our survey. By contrast, a score of 3.5 for the "DoD" reflects that the average firm in the survey works "somewhat" (3) or "mainly" (4) for the US Department of Defense.

We also examined the extent to which firms share customers by analyzing the correlations between different customers. For example, if a firm works for the DoD, how likely is it that they also work for NATO? In fact, Table 10 indicates that there is a reasonable, negative correlation between working for the DoD and working for other customers with the exception of NATO, which gives us our highest positive correlation on the table. This suggests that firms that work for the DoD tend to specialize in such work to the exclusion of working for a more diverse customer base. This result captures an important point: firms tend to be diversified in their service offerings (see the next section of the paper) but specialized in the customers they service.

On the other hand, working for the US Department of State (DoS) is positively correlation with working with most other customers. Working for USAID seems to be most correlated with working for non-US-government entities as well as NGOs, a result that makes sense intuitively. It also makes sense that the correlations between working for corporations and private citizens are reasonably strong. These results are, in turn, negatively correlated with working for the DoD, which again indicates the existence of specialization in serving different customer types. EOD/Demining has the strongest relationship with firms working for NGOs. In Table 10, we have highlighted several of the key correlations to enable readers to pick these out more easily.

Table 10.   How Much Firms Share Customers

	WFDoD	WFDoS	WFUSAID	WFoUS	WFStates	WFnonUSG	Wfcorps	WFpvtctzn	WFUN	WFNATO	WFNGO
WFDoD	1.000	0.133	-0.134	-0.151	-0.006	0.164	-0.198	-0.1034	-0.23838	0.569641	0.166411
WFDoS		1.000	0.160	0.130	0.391	0.121	0.118	0.187249	-0.06375	0.272985	0.325468
WFUSAID			1.000	-0.102	0.182	0.309	-0.026	-0.0642	0.367635	0.124025	0.368599
WFoUS				1.000	0.069	-0.173	-0.069	0.173766	-0.33707	-0.04177	0.008883
WFStates					1.000	0.096	0.081	0.156694	-0.05993	0.041311	0.284073
WFnonUSG						1.000	0.335	0.061296	0.375767	0.212531	0.196941
Wfcorps							1.000	0.306646	0.284044	-0.00557	-0.05034
WFpvtctzn								1.000	-0.14041	0.017206	0.04879
WFUN									1.000	-0.085	0.08135
WFNATO										1.000	0.335624
WFNGO											1.000

Table 11.   Who Firms Hire by Who Firms Work For

	SkillsMil	SkillsSpecOps	SkillsLawE	SkillsIntel	SkillsLegal
WFDoD	0.397	0.259	-0.137	0.354	-0.054
WFDoS	0.161	0.325	0.325	0.170	0.311
WFUSAID	-0.062	-0.088	0.189	0.017	0.128
WFoUS	-0.044	0.225	0.190	0.354	0.275
WFStates	-0.168	0.145	0.252	0.163	0.224
WFnonUSG	-0.003	-0.044	-0.042	-0.016	-0.092
Wfcorps	-0.270	0.012	-0.243	-0.332	-0.045
WFpvtctzn	-0.011	0.341	0.100	0.120	0.087
WFUN	-0.208	-0.293	-0.052	-0.336	-0.145
WFNATO	0.301	0.164	0.123	0.296	0.198
WFNGO	0.068	0.277	0.171	0.179	0.221

Since one way of thinking about PMCs is that they perform a "matching" service between end customers and labor (Spulber, 1998; 1999), we also looked at the type of employee skills associated with firms and the customers serviced by firms. We report this data in Table 11. Again, the notion of firms as "bodyshops" pops out in this data. Not surprisingly, firms that work for the DoD employ personnel with military, special operations and intelligence backgrounds, whereas firms doing business with the DoS are more likely to employ personnel with special operations, law enforcement and legal backgrounds. We also see higher correlations between intelligence skills and "Other US Government Agencies" (for example, the CIA). Overall, we think Table 11 strongly supports the conceptualization of firms as matching services

C.   The Diversified Service Offering of PMCs

One of the findings in our prior research on the PMC sector (Dew & Hudgens, 2008) is that the commonplace "tip of the spear" heuristic for describing the industry (popularized in Singer, 2003) hides a more complex picture of market niches in the sector. Based on our analysis, the private military-contracting business is much more heterogeneous than previous accounts have stressed. The sector is made up

of different sub-sectors, which are probably better thought of as a patchwork quilt rather than as elements up and down the spear. This is particularly true for what is by far the largest category of firms that do military support work. This contains a smorgasbord of sub-sectors, or niches.

In question 9 of the survey, we collected data to examine the market niches firms operate in. Figure 6 illustrates the responses we received.

% firms involved in different market niches
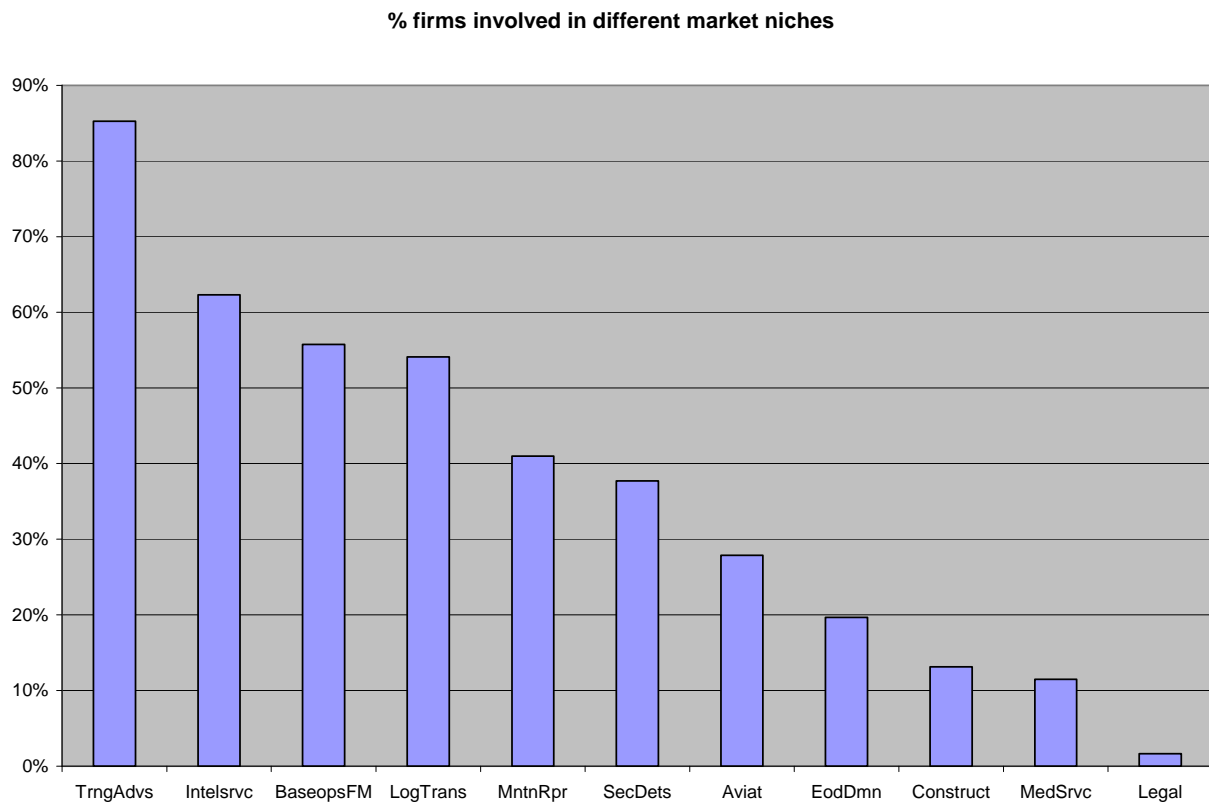
Figure 6.   % Firms Involved in Different Market Niches

This data confirms that firms in the industry are *most frequently* involved in support services such as intelligence, base operations, logistics, maintenance and repair, etc.

Moreover, in our prior work, we suggested that firms tend to work in a variety of different niches at once and that even this hides the degree of latency in the industry since firms may have the potential of switching into other niches given the

resources at their command. The diversification of firms—and the even higher degree of latent diversification—partly explains the adaptability of the PMC sector as a whole since firms readily switch between market segments and activities, depending on client demands. This switching was also in evidence in our interview data, in which interviewees showed an acute awareness of "where business is heading" in the sector, i.e., where the next big contracts are to be had. Figure 7 shows the average number of market niches firms operate in (that responded to our survey).

Frequency count of number of services offered
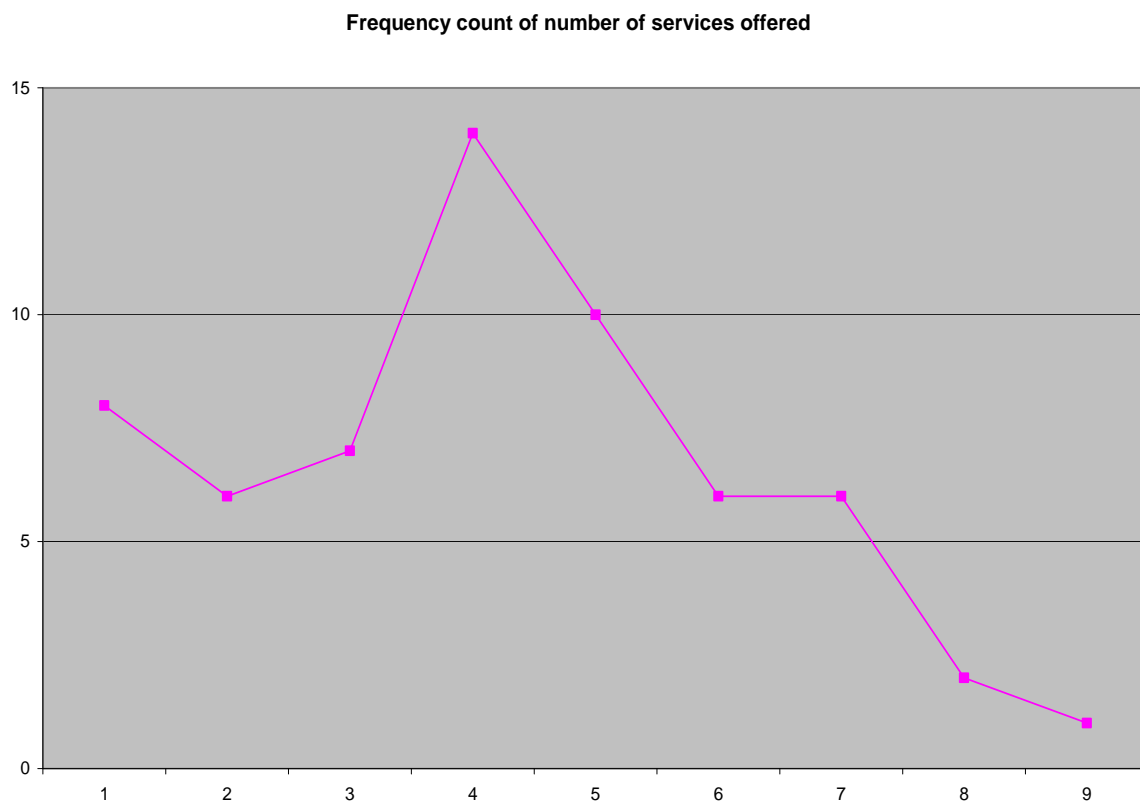
Figure 7. **Frequency Count of Number of Services Offered**

Figure 7 captures the average degree of diversification among firms. The number of niches ranged from 1 to 9 (horizontal axis). The modal (most frequent) response is 4 segments/niches, and the average is 4.1 (horizontal axis). In our data, only 8 firms (13%) were "pure plays" in the sense that they operate in a single niche

in the sector. 87% of firms operate in more than one niche, and 2/3 of firms operate in four or more niches. Thus, the industry does appear to be diversified.

D.   Why Firms Cooperate

In this section, we report data on questions 15 and 18 in the survey: why firms choose to cooperate or not cooperate with other firms. Firms active in different segments of the industry were generally homogenous with regard to the factors they highlighted as important in cooperating with other firms. The only exceptions were found in the responses of firms that do a lot of their business in training. These firms showed reasonably strong correlations between not wanting to work with firms that were "high profile," "not careful," had poor employee quality, or "can't get the job done." It is possible that training firms are just more forthcoming in their criticisms of other firms. It is also possible that this result is a genuine one that is consistent with the following: training-oriented firms are more selective in the firms they partner with because their training focus incorporates a set of professional values that esteem highly effective military professionals who do their work below the radar screen.

Figure 8 indicates the raw scores (relative to the mean score) regarding the factors firms consider important in selecting partners to cooperate with. Note that "professionalism" and "ability to get the job done" are ranked highest. Interestingly, whether firms also compete with one another is not considered important, which is consistent with the observation that the industry is dynamic and "liquid," meaning alliances shift quickly, the industry is incestuous, and firms that compete for contracts often end up subcontracting with each other in order to fulfill them.

Factors affecting cooperation between firms
differences vs mean score, with +ve scores indicating key criteria

Note that professionalism, qualified employees and get the job done = important criteria, but low profile is not important at all. Of course, these 3 issues are linked issues.
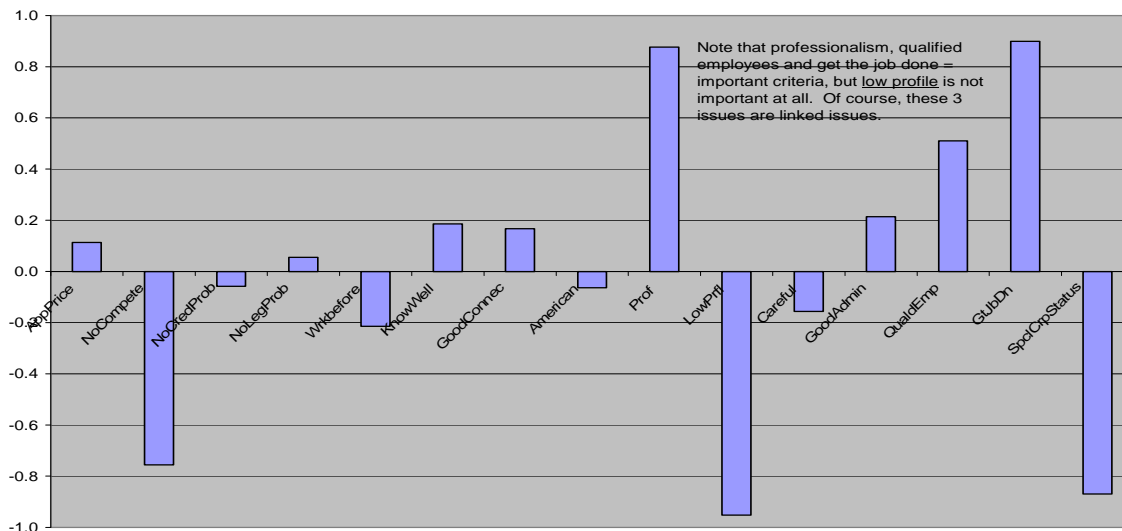
Figure 8. **Factors Affecting Cooperation Between Firms Differences vs Mean Scores, With +VE Scores Indicating Key Criteria**

Figure 9 indicates the raw scores (relative to the mean score) for survey respondents on why they would avoid cooperating with another firm.

Factors making firms AVOID cooperating with a firm
scores vs means; high +ve scores indicate the key criteria that matter

Legal issues, lack of professionalism, bad administration, not being careful, poor employees, can't get the job done = key criteria for avoiding cooperation with other firms
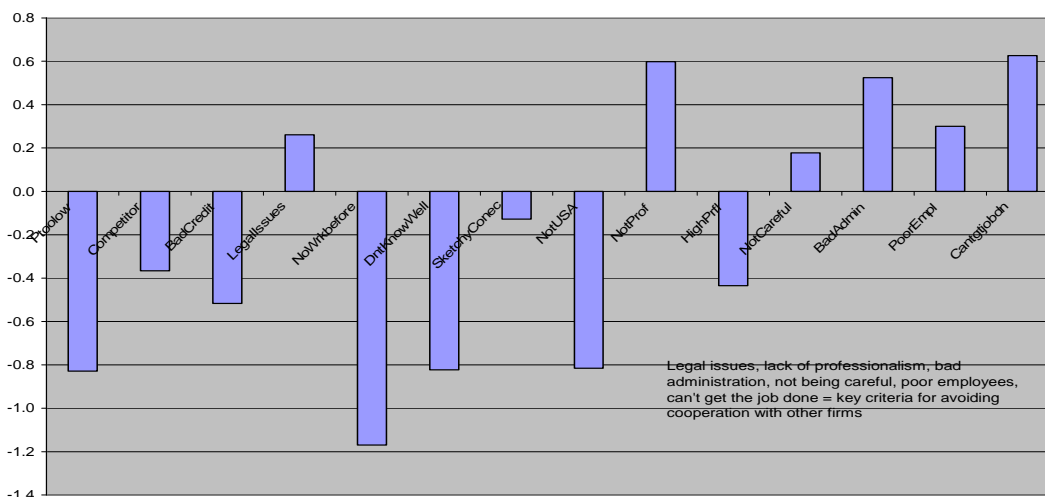
Figure 9. **Factors Making Firms AVOID cooperating with a Firm Scores vs Means; High +VE Scores Indicate the Key Criteria that Matter**

We ran correlation analysis on the panel of responses in Figures 8 and 9 in order to examine the factors that tend to be correlated with one another. Not surprisingly, "lack of credit problems" and "lack of legal problems" are highly correlated, as is "know-well" and "worked before" with a firm.

It is interesting to note the reasonably high correlation between "know-well" and "low-profile." What does this tell us about what it means to be "known" in the field? It seems to suggest that respondents' opinions about how low profile a firm is are colored by how well they know the firm. This would be consistent with insiders being knowable about which firms try to stay low profile, though media attention might make them high profile. Thus, outsiders who don't know a firm might see it as high profile, whereas knowledgeable insiders see the same firm as low profile.

Quality of employees and professionalism are reasonably well-correlated criteria for selecting partners to contract with.

Not surprisingly, there is a significant correlation between "quality employees" and "good admin" and between "bad admin" and "not professional." These are consistent with the numerous mentions in the interview data we gathered about how corporate culture is set from above and, thereby, can be linked to problems in the field (when such problems occur). It is also consistent with the interview data on hiring practices, which highlighted that firms that are well administered (i.e., professionally led) tend to have tighter screening processes for employees they hire. In all cases, these correlations seem to reflect interviewee remarks suggesting the industry is tightly networked and that networks run largely along the lines of professional affiliations, i.e., that prior military or security qualifications are important, not just as a quality stamp but also as an entry ticket to the professional networks that put people into jobs in PMCs.

There is a high correlation between "price too low" and "bad credit" that needs little explanation except to say that this is typical across many industries, not just among PMCs.

"Legal issues" understandably correlates with perceptions such as "high-profile," "not careful," and "not professional." This is consistent with the interview data that links all these together for a few firms (in particular, the image of Blackwater) that have had problems in Iraq.

In Figure 10 we have summed the responses to why firms cooperate and why they don't cooperate in order to provide a crisper image of the key criteria that stand out when firms are talking about what matters to them in their own industry. We think this is potentially an interesting insight: by asking firms to tell us why they would cooperate or not, we are gathering information about what criteria they use for evaluating other players in the industry. Interpreted this way, the data presents a number of interesting observations about the mental models PMC managers have regarding the industry.
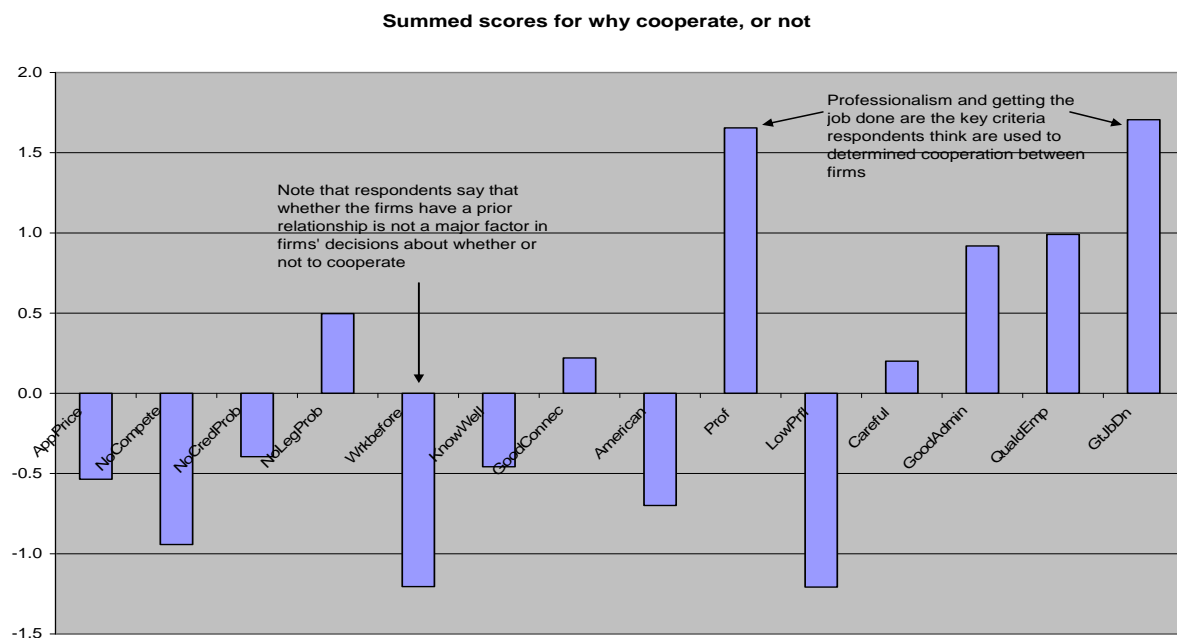
Figure 10. Summed Scores for Why Cooperate, or Not

Finally, we should mention that there are a few factors that appear to have some influence on *how many* firms a given firm will contract with, though none are very strong. The strongest predictors that a firm will do more partnering are heavy

involvement in training and working for the DoD (0.332 for both). Firms that score highly on these measures report higher numbers of firms with which they co-contract. Firms that place a higher value on intelligence experience in employees also report more partners (0.283). In all these cases, one might conclude that the use of collaborative arrangements with other firms is a mechanism for fulfilling contracts, i.e., firms routinely subcontract with others. The extent of subcontracting is probably higher for the DoD work because of the large scale of the contracts; for training-oriented firms and those that hire a lot of intelligence employees, the driving factor might be that firms rely heavily on networks of contractors to fulfill these type of roles. These are the "bodyshop" type of firms. The size of a firm's permanent employee base had little effect (0.072) on the number of companies they reported as having worked with in the industry.

Firms that reported more contracting with other firms were more likely to emphasize partners that price appropriately in their survey responses. Also, as they co-contract more, firms say they avoid firms they deem "not careful." This is corroborated on the other side by firms with a high number of partners who say they avoid "careless firms" (0.282).

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V. Conclusion

By way of conclusion, we would like to suggest that there are several directions for future research that emerge from the work presented here. First, we have only reported the results of parts of the survey; two other sets of data that we collected in the survey remain to be analyzed in future work. One is respondents' remarks in the last part of the survey, in which we asked about the future of the industry. This data might be coded and used to generate an informed picture of where industry insiders think the industry is going next. In such a fast-paced and turbulent industry, such results are no doubt perishable, but also useful in understanding the direction of the industry for the foreseeable future.

A second set of data we collected in the survey is information on firms' relationships with other firms—who they do (and don't) business with. This data set is ripe for network analyses to understand how firms cluster in the industry. What can we learn by examining the "in" and "out" networks of firms, from mapping patterns of cooperation and affiliations that exist in the industry? Network theorists generally argue that such affiliations represent some kind of screen or filter. Fundamentally, the claim here is that it is easier to observe who firms are affiliated with than it is to observe their quality. Therefore, affiliations are the coin of the realm for signaling a firm's attributes. This means that firms will seek out high-status affiliations in order to suggest their quality (and hence influence customer willingness to pay, which enables them to price higher and make higher profits). This might mean affiliations with high-status customers (such as the DoD) and/or high-status suppliers (such as special operations personnel), as well as affiliations with other PMCs that are seen as brand enhancers. In short, the hypothesis here is that the social structure of the industry may strongly influence the perceived quality of firms in the industry. There is plenty of room to examine the nature of PMC networks in order to better understand how these affiliations work to create value in the industry, make some firms successful, etc. In particular, the upstream (customer) and

downstream (supplier, in this case labor) affiliations of firms have been less examined in terms of their signaling value, but they would be very relevant to look at using this data set.

Along with analysis of the survey data, the interview data we collected could be subjected to further analyses. So far, we think we have merely skimmed the surface of analyzing the data. This data bank is ripe to be worked on, and could also be combined with some elements of the survey data in order to produce more cohesive overall findings. All this remains for future work.

Lastly, in part four of the paper, we highlighted one way of thinking about PMCs: they perform a "matching" service between end customers and labor. In colloquial terms, practitioners refer to such firms as "bodyshops" (Bartlett & Steele, 2007). This notion provides a number of useful insights into the PMC industry in general that could be further developed empirically by a detailed analysis of elements of the survey data in this study, as well as developed conceptually by drawing on Spulber's work on the topic (both popular and academic—Spulber, 1998; 1999). This would enable readers to better understand what exactly the service is that PMCs provide (i.e., how the industry adds value) by seeing the common threads between PMCs as providers of the same kinds of underlying services as Wal-Mart does in discount retailing (a supermarket that reduces the transaction costs in military services) or Carmax does in used-car sales (a quality screening and guaranteeing service).

Finally, it is worth reiterating that our primary objective in this paper is to help our audience (mainly acquisition professionals in the DoD) do their jobs better by developing a comprehensive picture of the PMC sector, which up until now has been lacking. The basic rationale for this approach is that before one can make informed choices about what services to acquire from whom, one needs to understand the industry playing field, i.e., have a more comprehensive overview of the players

involved and the landscape of the sector. With such knowledge in hand, it is possible to conduct a contracting process that obtains better value for the public taxpayer. Since there seems to be no general abatement in the use of PMCs, better comprehending the sector's wide variety of market segments and players remains an important issue to which we hope this study makes some contributions.

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Appendix A.

Telephone Interview Instrument

Start-up Remarks

1. Thank you for being willing to spend a little time talking to me.

2. I wanted to let you know that it's protocol in any study like this to keep all data confidential and to ensure that interview data cannot be traced back to particular interviewees. So I wanted to make you aware of this.

3. Next, I wanted to mention that I'm going to keep notes on the interview, and in order to make that easier, if it's okay with you, I'd like to record the interview. Is that okay?

4. It's also protocol for me to mention that you can stop the interview anytime you want to.

5. Okay, then, let's start.

Part 1: Your Organization

1. If I could, I'd first like to collect some background information.

2. What's your title and role: what do you do? How long have you worked for X firm?

3.   What did you do before that? And how many years experience would you say you have working in security/military roles in total?

4. When was your company founded?

5. Where is your company's official HQ location?

    a.   Do you have any other offices?

6. Roughly how many employees do you have?

    a.   Permanent
    b.   Contract

7.   Can you indicate roughly what your annual sales revenue is?

    a.   More than $1MM
    b.   More than $10MM
    c.   More than $100MM
    d.   More than $1BN

8.   Is your company publicly or privately owned?

9.   Who founded your company and what was their background?

10   <u>Next: I'm interested in understanding your organization. So, can you tell me about your what your firm does? Who are your employees and customers? Where do you do work? What kinds of services do you offer?</u>

11   Prompt specifics: How would you generally describe what your company does? What does your company specialize in?

12   What type of services does your company offer?

    ➢ (Examples/prompts)

    a.   Protection services/operational support
    b.   Consulting/analysis
    c.   Training
    d.   Logistics/facilities services
    e.   Other

13   If protection services, what kinds of things do you do?

    ➢ List of options: facilities protection, convoy protection, close protection of individuals, dog teams, etc.

14   (Does your company offer training and/or have training facilities? What type?) What type of training and training facilities does your company offer?

15   Does your company provide any advisory or analytical services? What kinds of things do you do?

    a.   Auditing/analysis
    b.   Planning and strategy
    c.   Other

16   Does your company provide any support services?

      a.   Aviation support
      b.   Tactical equipment
      c.   Intelligence surveillance and information
      d.   Medical support
      e.   Command, control, and communications
      f.   Crisis support
      g.   Investigations
      h.   Equipment maintenance
      i.   Logistics
      j.   Base operations
      k.   IT/IS services
      l.   Administrative services
      m.   EOD/de-mining
      n.   Other

17   In what regions of the world does your company operate?
      ➢ Country list

18   Who, in general, are your clients?

      a.   Private sector   (many/few)
      b.   Government departments (many/few)
      c.   International organizations (many/few)
      d.   NGOs   (many/few)
      e.   Private Individuals   (many/few)

19   Which clients do you do the most business with?

20   In what regions of the world are your clients located?

      ➢   Country list.

21   I am also curious about your employees. What prior work experience do your personnel tend to have?

      a.   Military (Army, Air force, Navy, Marines)
      b.   Special operations
      c.   Law enforcement
      d.   Intelligence services
      e.   Commercial
      f.   Other

22   What nationalities do you employ?

23   Are most of your employees full-time or contracted?

24   What would you say are the other critical resources your company depends on, other than employees? Prompts:

      a.   Company reputation
      b.   Management talent
      c.   Status/rank of management/key employees
      d.   Contact network (with former employers, or to source new employees)
      e.   Facilities
      f.   IT/IS
      g.   Other/etc.

End of PART 1.

Part 2: The Market

1.   Starting question: So, are there different types of firms in the sector, or are firms pretty much all the same? How would you say the sector was segmented? What are the most important differences between firms?

(Hopefully the interviewee will say something like: "Well, there are lots of different types of firms in the industry—firms that do PSC work are very different from firms that run facilities, or ones that do information analysis, for instance.")

Follow-on question: Well, how many different segments would you say there are? What segments are there?

Interview response.

Follow-on question: So, within the X segment you just mentioned, are there further differences between firms, or are all X firms the same?

And so on. Interviewer asks the same follow-on question until the interviewee says there are no more differences between firms in that segment. Then, the interviewer goes back to previously mentioned segments, and asks the same follow-on questions for those, until all segments have been exhausted.

Other Prompts:

1. What are the differences between companies that offer similar services as you? (Refer to interviewee's previous answers.)
2. Do you consider there are any differences between companies by virtue of the employee pool they draw on?
3. ...between companies that provide this type of service?
4. ...between companies that operate where you operate?
5. ...between companies that service this type of clientele?

Competitor Question:

1. Finally, who do you consider to be your most important competitors?
2. Why do you think these firms particularly competitive with you?

Final Question: About the Future

1. What do you think the future holds for the industry? How do you think the industry is going to evolve? What do you think are the critical drivers of this evolution?

End of PART 2.

Interview Close

1. Is there anything else you'd like to mention before we close?
2. I'd like to thank you for your time and for sharing your thoughts with us.
3. I'll be sending you a copy of my notes on the interview so you have a record of what we talked about.
4. If you have any follow-on queries, you're welcome to contact me by phone or email—you have my contact details.
5. Once again, many thanks.

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Appendix B

Excerpts from PMC interviews

➢ Yes. Corporate culture is always driven by leadership. I would say that really the key is that the leadership within the organization define and pushes down through the management structure how they want that organization to be perceived and the level of professionalism that they want that organization to operate under.

➢ And the military just does not have the breadth and depth to continue to move in [to Africa] and to expand. They are going to have to rely on contractors to do that. Especially as long as they maintain the point that it is humanitarian in nature and not military. The best way to do that is to do it with contractors.

R1:　Why is that?

➢ Visibility. They want nothing less than to have a lot of military uniforms running around on the African continent, because it starts to look very much like a military operation at that time rather than a humanitarian relief organization. I think you'd get a lot of push-back from the Department of State as well if they started to do that.

➢ Yeah, well, I mean, we depend very much on revenue; we depend very much on profit—maintaining a profit margin, growing business at a certain percentage each year. We depend very much on a network of contacts.

I1:　But, a reputation, if you're asking me about what facets are important to me within a company in order to grow it…that makes sense. Reputation—very, very important. Repeat customers—very, very important. And, I mean, that helps with your reputation, doing good work every time. Having a strategic vision… insuring that you push that strategic vision down to every employee so as you move forward everyone understands and they work in lock [?] step.

➢ Competency is something that other people can't easily do, your specialty, and it makes you unique and it grows your business; whereas, a capability is something that a lot of different people do.

[On what makes firms competitive with this small firm -]

➢ Just their size, access to resources, access to large amounts of money. You see, our…we are in an interesting situation because we are…we were a small company and we still are. But, because we were purchased by **** inadvertently we have the pull of a large company, So, we can't go for any of the small-business contracts that most people our size would win now because we have to go after contracts that the Booz Allens of the world and the Northrup Grummans of the world are going after.

➢ and that's, that's a very hard problem to solve. So, as we move forward with technology—and technology is moving much quicker than our ability to protect ourselves, so [inaudible] with continue to grow, I guess is what I'm saying. We positioned ourselves here because we believe that the IT security market will continue to grow, and, again, that's just based on protection of information. How do you store and protect information from an invisible enemy? You have to name [?], you have to n—you have to be connected, right?

➢ Most of our permanent employees, well, all of them, I believe. Most of our contractors are, the largest percent are, local or third-country nationals.

➢ Well, at our heart, we are a human capital company. We have to go find tools, specific tools and talents to perform specific jobs. So, word of mouth and networks are extremely important to us to be able to find those people.

➢ I1:   Sure, I mean you can have a high-end firm like a Blackwater, or a ridiculously low-end firm like Crescent, and everything in between.

R1:   What makes a high-end firm a high-end firm?

I1:   The skill and the training of the people they employ, the leadership that supervises them—that leads them. Certainly the success of their missions, of their contracts that they provide. Their ability to work in dynamic environments and to work comfortably.

R1:   Okay. What are hallmarks of a low-end firm?

I1:   A complete lack of discipline, a lack of vetting, lack of training, severe lack of leadership, not understanding the environment in which they are working.

[in response to the question about problems the informant observed amongst construction contractors -]

➢ No, no, I mean leadership is the main current, but certainly it is more difficult to do logistics in East Africa than it is in, well it is probably more difficult in East Africa than it is in Baghdad. It is probably more difficult in Afghanistan, in Kabul, than it is in Baghdad, or certainly in the outskirts. So, to some extent it is geographical, but I think it is a mix of geography and *leadership.*

➢ I guess to some extent it is all of that, but really it comes down to the interaction between the leadership of their people and the leadership of the people whom they would serve. You can truly tell the difference of who's got more experience at all of this if you are in the room with different levels of groups of people. Totally. So, yes maybe it is the way they advertize, maybe it is the way they don't advertize. Maybe it is some sort of whatever, savoir faire that they might demonstrate…sort of very…sort of clear understanding of what they are doing, they exude an experience that you might not find. So yeah. (p. 13)

> I mean, KBR is a fantastic…I mean the reason why everyone is digging [?] over there every day is because of KBR. I think where you run into trouble is when you sub-contract to some of the local firms that were starting to just be able keep some of that economy in the country. (p. 14)

(on the topic of Medical Support)

I1:   Same there. It's usually wrapped into something else that we're doing. So, we have to have a clinic, for example, for the Baghdad embassy security force. We have to run a small clinic.

R1:   Now, is that a requirement for gaining the contract, or was that part of the contract?

I1:   It was something that evolved. What happened over there in general work contractors is that there were obviously a lot of contractors over there doing various things, and they were all going to the CASH [?], the military hospital, for everything from colds to obviously much more serious injuries, and the CASHes were getting overwhelmed, And so what happened was the government started helping some contractors stand up their own clinics to do routine day-to-day care to their employees so that they weren't overloading the military hospital. And, granted, it was quite hard for the government to figure out a way to charge the contractors for that.

> That's one of the things that—[you're getting really ?] close to my marketing brainwashing here—that the key thing for ******* is that the company has developed a good reputation and it wants to keep that reputation as a high quality company within this market space. The management talent obviously falls in that as well because we have management people here, particularly the ones on the operations side are individuals of significant amount of experience in the military—special operations, Delta Force, what have you. So, if you look at companies in this space and you add up the number of

years in the military, if you take our key management personnel and add them up, we're heads and shoulders above a lot of the other companies as far as experience in this space goes. (p. 17)

➢ And then contact network—one of the things that we do really well, has been a distinguishing factor for us, is our ability to recruit the right kind of people to do the work. Some of the larger defense contractors, we get into this space— [your Lockheed and your Raytheon ?]—don't always have the right kind of resources to recruit, make sure you're selecting the right kind of individuals to do this work. (p. 17)

➢ Well, I think it's the changes by the government, and then secondly, it's the draw-down, the change in the landscape of Iraq because there are a number of companies who, for a number of years, had a significant amount of work in Iraq and that's probably going to start to decline. So, you're going to see companies consolidating both to maintain market share and also—more likely, maybe, than even maintaining market share—diversify themselves so that they do other things across the [service offering ?].

➢ So, you might see a company that does security work want to get into mine and ordinance disposal or get into the kidnap and ransom consulting so that they have different business arms [?] and they're not totally dependent on the protective security work that they're maybe doing in Iraq. (p. 11)

_____

➢ The US government is very lax in putting other things into their contracts besides to say that we want twelve guys with guns to be a torch for this convoy. There's more to it than that in that you've got to have housing for these guys; you have to have food for these guys; you have to have medical for these guys; you have to have all the various things, you know, laundry services for these guys—all those types of things that you have to have [inaudible]…all these things you have to have that the government inherently

has with the military. Private security companies focus a lot more on providing funds support for personnel and not so much on providing the support type services, so they tend to get caught short or try to rely on the government to provide those services for them.

➢ It's the same pool of people that they're hiring from—so the only real differences between them is who owns the company and how much they're paying. You know, but the talent that they use, the actual resources, the guys on the ground. A guy may work for Blackwater one week, and he may work for Triple Canopy the next week, and he may work for me the week after.

➢ One company was having trouble finding qualified people to staff it. No matter how much they were paying, they just couldn't find the talent to actually staff it, so they ended up losing the contract to another company that underbid them and said, "Yes, yes, we'll be able to find the talent." And now, that company is either…they are paying less than the previous company, and they're still having trouble finding personnel, so they'll probably lose the contract. In Iraq, it's a unique scenario to us from what we've seen in that in Iraq, the government has managed to drive the wages down so far that companies are now having trouble finding…where when Iraq first kicked off you had a lot of former military, former special operations guys going over there and making a lot of money and everything else. But the government has managed to drive the wages down so far now that the military sort of guys that were going over there originally are like, "It's not worth my life anymore." So, companies now have to go and find the sheriff from middle Georgia who worked in the sheriff's department there for two years. Now he's over in Iraq carrying an automatic weapon and guarding convoys with no real background in it.

I1:   No. Nor, by the way, did *******. And that was because I chose not to get into those areas. We had lots of opportunities to do that, but it was not our mainstream, it wasn't our lane. As we looked at this we thought, you know, we could get into electronics, we could get into vehicles, and we could get into specialty avionics, and just decided we didn't want to go there. We did have all those things that were required in order for us to do our job. So, we had armored cars, but we weren't an armored-car company selling armored cars. We provided armored cars as part [of] a protection detail.

(On the difference between who you recruit for what)

➤ For security services, they are interacting a lot more with the public. They are domestic. They are working at embassies. So it is a different type of guy. Sure, you get guys who were in the military, but maybe they got out, maybe they did 6-8 years of civilian law enforcement. The difference between a cop and a soldier: the first thing a soldier is going to do is draw a gun, absolute first thing. The last thing a cop is going to do is draw his gun. The soldier will draw his gun to hold you at bay. As soon as the cop draws his gun, you are shot. That is just how they think. So utilizing police officers is much better in sensitive situations because they will try to talk a situation down before they escalate it. And I would say, in my opinion, soldiers escalate it because they will pull them for [inaudible]. So different level of education, different level of temperament, so they all come from different backgrounds. Most guys end up coming from having some military at some point. Until you get into much more of the consulting and advising roles—let's say security-sector reform work, where you are actually educating police officers and lawyers—how do you change the situation in a sector? And you end up getting a whole bunch of cops who do that.

➤ We spent a lot of years as a small firm so the CEO is very stringent on investment vehicles. It is awful hard to get the ability to invest and start new

things. [inaudible] and so it works. A lot of these services…it is kind of interesting, we never planned on getting into security. We went to Iraq to do the ammunition disposals, [sit on the end ?]…there was just so much stuff that we were blowing up—200-300 tons a day for 3 ½ years. When we first got there, the army branch nearest said, "well, it was contracted that they would provide our security" and 20 days in they said, "hey, we're not going to provide you security, you have 15 days to figure it out." So, we hired another firm, initially for 2 months, and then we decided that we could probably stand on our own, and this was back in '04. We stood up our own, and it ended up being an extreme growth market for us—up to a third to half of our revenue now.

➢ Credit lines. The US State Department might pay you in 60-90 days—you would be lucky if the UN pays you in 9 months. So, just think about it. You are standing up a 200 man job, and you are not going to get paid for 2 months. You are going to be looking a $1 million of payroll a month, at least.

I1:   Do you want to know the worst thing in this job?...TCN management. That will send a contract; that will destroy you. Because often times you are using an in-country recruiter and then … show up all of these guys who really, actually don't speak English, or have Hepatitis. And so you've got that issue—are you getting decent, healthy, appropriate individuals from your in-country recruiters. Then, you actually have to work a lot of the…that's just the language of the problem. Then, you have to work out the nationality issues. ****, they hire El Salvadorians and Hondurans and put them on the post together, and they start shooting at each other because they hate each other. So, you've got national issues. You've got menu issues—you need to feed them what they like eating. Food is a huge morale issue, so you need to just…I think in our chow hall, we serve 4 cuisines. We serve American, we serve Halal, we serve…[we go get something they like eating ?], we make it. I can't remember what the fourth one is. But, it's like an Asian cuisine thing for

the support workers. And that is where you are going to go south because—there is no nice way to say this—you get what you pay for. When you are paying $30 a day, you are not going to get a squared-away US operator. You are going to get a Northern African previous soldier. When you get good ones, awesome. You are always going to get your 10%. That's why a lot of guys talk about their 10%, and it also applies to US and OCN's as well as TCNs where they are just not good. They have bad attitude; they have bad morale. I have seen…just there are lots of companies that have been sunk on contracts because of TCN management.

➢ [E]ach firm has a personality. That sounds funny but working with each firm is different, and I suppose the personality flows down from their senior management and how they want to do contractual relationships with employees, how they handle customers, and what is the type of work they are willing to go after. So, you might be able to say that it comes down to overhead because how much are they going to pay, and how much senior management are they going to put on the ground.

➢ It would be because you have a whole bunch of people coming back, and this is one of my major concerns: I have been focusing on Africa for the last couple of years. I don't go to the Middle East anymore. And standing up operations there, I can't use guys from Baghdad because they have the wrong temperament. So you can't really use many US guys because a lot of US guys can't handle being in Africa because a lot of time you are unarmed. The Brits have this strange mentality where they are expeditionary. They go out and they drink tea, sitting in the middle of a rebel village. [And for some of those guys it ends up working out ?]. But I've got, I don't know, about 450-900 US guys that, if Iraq stands down, I am not going to be using them in Southeast Asia and Africa because they are just not the right guys. A few of them will be, but not all of them.

- I like to point out that in March of 2007, you know, I think there were more academics studying this topic than Westerners actually doing gunned security.

- I mean, everybody reports there's what—200 or 300 security companies that are active, which may be accurate, but probably 90% of them are two people and a fax machine and a cell phone. [inaudible_____], things like that. So, they don't really count.

- There's just limited use of private security for humanitarian purposes, which is something we advocate, you know—protecting IDP camps and refugee camps and things like that, which I think is very easy to do with private security. In Darfur, you know, it would take about ten minutes if we stopped the killing. There's still the policy aspect, which still has to be sorted out, but that's something that policymakers should do for private companies.

- Obama has made it clear that he wants to wrap things up there and try to reverse the negative trend that is going on in Afghanistan. So, we'll see a lot more logistics and support there. Security there, interestingly, is 99.7%—or the [inaudible] security is 99.7% Afghan, which I think is pretty interesting; 0.2% is Americans, 0.1% third country nationals. And so it's very different than Iraq where half the security was Iraqi and the other half-third country nationals.

- I think one thing Iraq has proved beyond a shadow of a doubt about the industry is…I know Peter Singer and others have been claiming that once the shooting started the companies have disappeared. That really hasn't happened. I mean, you know, you go to KBR and in five years there has been—what—three or four convoys that were halted because of risk, which is about the same number as the military. The military ones had to disobey orders to not do their run, so the fact is the private industry has been very robust and ready to take risks and so on.

➢ I have to be careful with this. They [retired 4-stars] help. I would say basically what they've brought is their historical relationships. With that, that is truly a relationship position. Our new CEO is 40; he's a rocket scientist for real. With that, we are becoming truly a business entity. When I say that, we are creating the best of both worlds in our corporate strategy in the sense of being a truly lean infrastructure that functions at a profitable level because that actually introduces cost savings and value added to the government as well. Poor-run organizations always cost more.

➢ We're an underlying support structure for government functions. That's the best way to put it.

➢ When I think of a private military force, I think of the incidents in Africa and certain companies that are used for specific tools. Obviously, some of the ones in Africa were to start a revolution, etc., or protect the government. Yes, those are truly private military forces. You know, I know that Eric Prince one time said he could [inaudible]. But the vision of troops…he's not a military. I would not identify us, personally, as a private military force. I mean, that's just not what we do. We do training; we do infrastructure and design; we do logistics, contingency operations; but if the US government says we need 120 guys to go to Africa and fight for us, that's not what we do.

➢ They're right. When the war started, a lot of people…well, I'll give you an example. When the war started—and I think you can find this online if you go to the MNFI web page, which is the Baghdad multinational forces page—at one time there was like 170 security companies in Iraq. Out of that, the only registered companies for business that I know of…I think we're the only one. Even Blackwater and Triple Canopy don't have their licenses yet. So, what I'm saying is: yes, you're right, there were a ton of mom-and-pop, as I call it, organizations who tried to get into the game and then would try it sell…and then even Triple Canopy is for sale last I heard. Blackwater is privately held by Eric Prince, so when it comes to vertical integration, the smaller

companies have kind of gone to the [segue?]. The big ones have stayed status quo.

> I'd say it's the same. I mean, obviously being big gives you the ability to financially support yourself. One of the things in dealing with the US government is that they don't pay on time, so there is many a time that companies actually float bills for the government. Being larger obviously gives you a better cash-flow position or revolving line of credit, depending on how you're doing it, versus a smaller company where sometimes they can't afford that. Obviously, smaller companies sometimes have the ability to bend and be more flexible than a larger company, so I think it's apples and oranges. I think personally, it doesn't have that big effect. But someone from a smaller company might say different.

> My company, including myself, I encourage it. I'm a firm believer in transparency. I know that during my time in Iraq, I actually helped create some of the data that was given to the State Department on our program demonstrating who was performing well, who was performing poorly, the number of shootings, etc. I think that's important. I think the reality is, I mean, the work is never going to go away. It will reduce, but certain countries will always outsource certain parts of their work. The whole point is…a good example is the new [inaudible] agreement. Have you heard about that? Right? Which is a huge issue for contractors. That doesn't mean we're going home. I mean our guys are trained and up to the standards that they will follow all of the laws as it is. I mean, obviously, if anything happens—and I'm sure one will somewhere—it will be interesting to see how it plays out, but at the same time, we encourage guys to understand they are in a foreign country and to follow not only US law but the local laws. So, I'm in full agreement with any rules that come out.

> [We have a fellow to make part of our core competency to using his ?] as a partner. And he's just dogs. He's had lots of experience. His dogs went through—did a stint in Iraq, did a lot of good work there.

R1:   Okay. Wait, who was that again?

I1:   The—it's Patriot K9.

R1:   Okay, yeah. He's part of IPOA, too, as well, correct?

I1:   Correct. That's actually how we met up. [inaudible] so I gave him a call. [inaudible]; he's a great guy.

> I can't tell you why we went over there to begin with. It's probably because it was a good opportunity to make money, I suppose . .. We want to get back overseas because the margins for profit are better than they are in the States.

> [A]nd I think a lot of it has to do with price. They bid it too low and they don't have the money to keep the guys trained, to keep them properly equipped with…and looking good with uniforms, or they don't pay the wages. And you get 300% turnover in a year.

> It is the business model. We sell ourselves—because we don't advertise or do that sort of thing—we sell ourselves on our reputation …

> But we also—this will digress…this will get us off track a little bit—but when we have people who apply and send us resumes, if we can't use them, what we do is place them with somebody else. We forward their name along because these guys really want to get out there. So, what we do is if we know a good reputable company, and we trust and believe in them, then we will forward their name on. That's just…we pat each other's back.

> Well, from our experience—you probably saw our website—backgrounds, the way we approach things. We make sure we do this in a very professional

manner and not just…You've heard the cowboy mentality that goes on at some of these locations. We don't do that. So, we're building a different environment. There are stories that go on and on about—well, you know—people get out of control. We don't tolerate that. We're building a very professional corporation.

(On what makes for a cowboy firm)

➢ And that comes right direct from the people who run the company and how it filters down. They just kind of…some of them…like I know one corporation that was bought by investors 100%, and their quality of their people and their attitudes declined quite a bit because they were just doing it for the dime instead of worrying about the product and taking care of the mission and going down there and making sure that everybody's doing what they're supposed to do.

➢ No. It's strictly management. The employees are going to do what management will let them, or kind of if they turn their back like they don't care—"boys will be boys" attitude. That's where that problem comes in.

(Talking about being in a private company versus in the military)

➢ I think it's…it is a fairly important distinction, and that we don't forget. I mean, we don't consider ourselves government employees. And, then when I was on government service, I mean…I certainly…that was…Now, let me…let me…parenthetically, that doesn't mean that…that I…you know…I changed a persona or that my ethics changed or any of those things. I mean, those kinds of things are…continue from one…from one profession to the other.

- [F]ewer of our missions are concerned going after and actually doing the work for the host country. There is a period of time, obviously, when the, the balance between how much work the ***** personnel—person—is doing versus the host country person that we are working with is skewed to the side of the ****** subject matter expert. But, as quickly as we possible can, we shift that burden over towards the host country personnel so that they can learn by doing, where we are there just to assist them and guide them through the processes. We're also involved in some cases in individual, staff, and organizational training.

- By that I mean that there is kind of this notion that training people to fire really well is going to somehow potentially lead to human rights' violations. And we would…we would postulate that…that it's the exact opposite. And that is to say that disciplined soldiers who have confidence in their weapons are going to be far less likely to fire randomly than those that are unsure about their weapons, have rarely fired their weapons, and are not controlled by…by their leadership.

- As we…as we get younger people coming in who have not had military background that are doing different things, as we bring in police—they have a different culture—we bring in State Department personnel—they have a different culture. And I think one of the things that we do as a private organization that we bring to the table is the inner-agency coordination possibilities—capabilities. And, by that I mean that, as you know, we as a nation are still struggling with the ability for different agencies to work together.

- One of the things that we…that we bring in a…when we go into a theater— and I think this is across the board among companies, but I'd like to think that we do it well at *****—is that we can give you one-stop shopping to provide the…the relationships between the different cultures, be they state, military, USAID [?], law enforcement,…and that, whereas, even within a sub-staff—

say, the staff that you'd have in X country on the US side that is to provide support for that host country, and is also somewhat stove-piped within operations, intelligence, logistics, personnel, and so on.We…we…we tend to have a different philosophy for security, and thus far its worked out for us. There is…there's obviously a risk involved and that is that we…we don't tend to drive around in convoys with lots of guns. Some might say we don't have any high-value targets, and we try…we try to keep it that way—not to be so valuable that somebody's going to want to attack our two vehicles going down the road in Afghanistan or Iraq. In…in cases where we do need that kind of…that kind of support, we rely on the US military in order to provide that kind of…that kind of support. Our buildings where we live and so on like that are…are protected by companies that are contracted for by the…by the US government. And, so there's that…there's…and we…we are really a training and education company that goes all the way from the very strategic level, all the way down to training soldiers how to fire their weapons properly. There aren't too many companies out there, although the number is probably growing, that really have that kind of capability.

➢ They'll be able to go in to a ministry and operate with the minister and some of his senior subordinates.

➢ There are…there are companies that are…and ethics is always a very difficult…difficult value to apply, but there are some companies out there that are probably—in terms of their ethical standards—are maybe not…we…we would like to think that we have very high ethical standards that separate us from some other companies. I'm certainly not going to name any companies or anything like that, but…but…that…that…that…in this field…in these…the work that is being done here… There are companies that operate, frankly, more ethically than others.

➢ I understand what you're saying, and, I mean, one of the things we're somewhat fortunate in—that we don't get involved with—with armed security.

And so that is probably the ultimate area where…where behavior—and I won't even call it unethical—but, behavior will be…will be scrutinized to see whether it was ethical or not…is that area. And, so from that standpoint I…I'll be…I will admit that that [?] cutting edge it's a…you have a potential to get yourself in those kinds of situations where somebody's going to question your ethics—whether or not it's justified or not. But, I mean, that—shouldn't have fired/should have fired—you know, Indus—you know, etc.—all the things that we know about from a couple…some of the companies that have been…been involved with that.

(On how the company deals with bad behavior)

➢ That it…when something does occur, and the rare exception concerning people we have, for example, in Afghanistan, the person will be on the next plane out of there. I mean, there is no tolerance for…for bad behavior, basically. […] [Explanation of why there is a zero tolerance policy] And, you know, if there are violations, we have…whereas a military personnel might be punished there on the spot and have…you know…in our case, what we…what our core punishment…our ability really is to say "okay, violation of ruling, you're…you know…you're out of there." So…[inaudible].

(When asked if oversight procedures have changed given recent attention to contractors:)

➢ No, really it hasn't. We haven't changed one iota. Again, I think this goes back to the type of folks we have. They're taught ethical behavior in the military, and we don't have all Air Force people, but obviously the bulk of them are prior Air Force individuals. They're taught that in the military. They're taught the management skills and, I guess what you might say, dependability. You have a person that needs to work a little extra time to get the job done, they're going to do that. Those are the skills they brought with

them, and we've maintained that. That's why we've been on this contract for 21 years now.

> Well, no, I think there are differences between companies and the main difference…well, there's a lot of differences, but the biggest one—we just went back there. Going back to one of our previous questions is your repetition—or reputation. I'll get it right here in a minute. And, you know, what you bring to the table as to what your expertise is because some companies are very strong in security. I'm sure, there are other companies that are very strong in civil engineering area, and I'd use KBR as an example of that with all their doing over in the Afghanistan and Iraq areas. And there are some companies, like ourselves, who are very strong in, as I see it, doing a variety of functions supporting an entire base complex.

> It really boils down to most of the cost in this business is labor, so the real challenge is to be able to attract good talent that can manage and do the work you want them to do, but yet at a fairly low price. In other words, keep the labor costs down. What makes that a challenge particularly for us is outside the areas where you would receive the hostile fire pay or the hazardous pay is the fact that those places where they get that sort of differential—get those big bucks—draw a lot of the top talent.

> Yeah, I would say basically it is like this: ***** doesn't own property, so all of this property belongs to the Government and once the contract ends, we will give it all back to them. What ***** brings here is a lot of really skilled people who are really skilled in the particular job that they do.

> Well, they're all the same in [that] they're getting money, but aside from that, there are all sorts of various models, especially among those companies and what they personally can do and think they're about, and their ethos. Between a DynCorp and ArmorCorp, an Aegis or a Blackwater—under an assumed name these days—or Triple Canopy, they all have a slightly

different take and ethos. ******, itself, too—which kind of colors its approach to the various topics. You know, the Blackwater approach being a more tactical approach to it. The **** being a little bit more operational in their approach to it. So, even the level of entry into these various things differs among the various companies playing to their strengths. I found out in the companies of those that in the hiring line hired folks at the company grade or lower primarily as their employees, and that's how they kind of thought. If they hired at the general officer and colonel, low and behold, that's kind of how they thought. So the character and flavor of their employee base pretty much affected how they would approach the various problems.

➢ And also, the founders and the founders' philosophy too helps in shaping that, especially if it's more of a company that's more focused on a founder who is still around as opposed to a company that's been around forever like Pacific Architects and Engineers (PA&E) who's been around well beyond before the Vietnam War. So there's no personal founder left anymore and its moved on to a more corporate philosophy.

➢ I mean, there's a grouping of firms. The top one being Blackwater, mainly because they've invested in their own training facilities and invested time and effort and money in producing a tactical product.

➢ There is differentiation between [Intelligence contractors] too as to what they can handle and what they can't handle and what their niche is. I'm not sure which niches are the niches there, because they don't talk that loudly about their niches. And also to what extent they actually go in and do collecting is another issue that I'm not clear on. But as far as the processing analysis presentations and number crunching and things like that, they do quite a bit. And, of course, some of them become extensions of combat and command as well where they've provided secure facilities and other things to assist combat and command in various areas and places.

➢ That's an interesting conundrum that's come up. As the military puts more of its brainpower into contracting and contractors and have contractors begin to do studies and stuff that military staff used to do, one wonders whether the contractors are going to develop their own training programs because right now they've been able to depend upon fully trained military folks retiring and walking right into their world with enough expertise to carry the day. As the military gets a little smaller and as this crowd of folks reaches their ultimate retirement, where are they getting the feed to keep them running?

Appendix C

Survey Instrument

Private Military/Security Industry

Naval Postgraduate School
Graduate School of Business and Public Policy

Control No. _____

INSTRUCTIONS: Please select the best answer for each question. You do not need to fill in the bubble. Simply mark the answer with an ☐ or ☒ as appropriate.

Section A — Company Information

1. In what country is your headquarters located?

_____

2. In the past 18 months, where has your company conducted operations?

	Exclusively	Mainly	Somewhat	Little	None
United States	○	○	○	○	○
Europe	○	○	○	○	○
Middle East	○	○	○	○	○
South Asia	○	○	○	○	○
Asia Pacific	○	○	○	○	○
Africa	○	○	○	○	○
Latin America	○	○	○	○	○

3. What is the approximate number of permanent employees in your company?

Fewer than 50	51 – 200	201 – 500	501 – 1000	More than 1000
○	○	○	○	○

4. In the past 18 months, how many non-permanent or contracted workers were employed by your company?

Fewer than 50	51 – 200	201 – 500	501 – 1000	More than 1000
○	○	○	○	○

5. Where did your employees develop the professional or technical skills that are critical to your company's success? (Select all that apply)

	Exclusively	Mainly	Somewhat	Little	None
Military	○	○	○	○	○
Military – Special Forces	○	○	○	○	○
Law Enforcement	○	○	○	○	○
Intelligence Services	○	○	○	○	○
Legal Services	○	○	○	○	○
In-house Training	○	○	○	○	○

6. Where does your company recruit employees? (Select all that apply)

	Exclusively	Mainly	Somewhat	Little	None
United States	○	○	○	○	○
Europe	○	○	○	○	○
Middle East	○	○	○	○	○
South Asia	○	○	○	○	○
Asia Pacific	○	○	○	○	○
Africa	○	○	○	○	○
Latin America	○	○	○	○	○

7. What is your company's approximate annual revenue? (In U.S. Dollars)

Less than 1 million	1 – 50 million	51 – 500 million	501 – 999 million	More than 1 billion
O	O	O	O	O

8. To what degree are your company's services directed to the following customers? (Select all that apply)

	Exclusively	Mainly	Somewhat	Little	None
U.S. Department of Defense (DoD)	O	O	O	O	O
U.S. Department of State (DoS)	O	O	O	O	O
U.S. Agency for International Aid (USAID)	O	O	O	O	O
Other U.S. Agencies	O	O	O	O	O
U.S. State and Local Governments	O	O	O	O	O
Non-U.S. Government Agencies	O	O	O	O	O
Corporations & Businesses	O	O	O	O	O
Private Citizens	O	O	O	O	O
The United Nations (UN)	O	O	O	O	O
NATO	O	O	O	O	O
Non-Governmental Organizations (NGOs)	O	O	O	O	O

9. What defense-related technical services or government-outsourced solutions does your company offer its clients? (As a percentage of your total business)

	Very large (> 50%)	Large (31% - 49%)	Moderate (11% - 30%)	Small (< 10%)	Not part of our business
Training, Advising, & Mentoring	O	O	O	O	O
Intelligence Services	O	O	O	O	O
Logistical/Transportation	O	O	O	O	O
Base Operations/Facilities Management	O	O	O	O	O
Security Details (Armed/Unarmed)	O	O	O	O	O
Maintenance & Repair	O	O	O	O	O
Construction Services	O	O	O	O	O
Explosive Ordnance Disposal/De-mining	O	O	O	O	O
Medical Services	O	O	O	O	O
Legal Services	O	O	O	O	O
Aviation-related Services	O	O	O	O	O

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10. If your company provides services not listed in the question above, please specify what kind of services your company offers.

_____
_____

Section B – Business Factors

11. What characteristics set your company apart from other competitors in the industry? (i.e., employees, experiences, training, company ethos, competencies, etc.)

_____
_____

12. Which companies have competed directly against your company in the last three years? (List any company YOU deem a competitor.)

_____
_____

13. From the list above, what company do you consider your most significant competitor? Why?

_____
_____

14. Thinking of your company and the field today, if an opportunity arose, which entities would you consider subcontracting to or for? (Name as many or as few as appropriate.)

_____
_____

15. Why would you consider working with the companies listed above? (Select all that apply; you may choose different reasons for different companies.)

	Absolutely Critical	Very Important	Important	Somewhat Important	Not Important
They are priced appropriately.	○	○	○	○	○
Don't compete directly in the same space.	○	○	○	○	○
Absence of credit problems.	○	○	○	○	○
Absence of legal issues.	○	○	○	○	○
Worked for them before.	○	○	○	○	○
Our company knows them well.	○	○	○	○	○
Their connections may help grow our business.	○	○	○	○	○
They are American-based.	○	○	○	○	○
They are professional.	○	○	○	○	○
They are low-profile.	○	○	○	○	○
They are careful.	○	○	○	○	○
They are well administered.	○	○	○	○	○
They hire well-qualified employees.	○	○	○	○	○
They get the job done.	○	○	○	○	○
They have a special corporate status.	○	○	○	○	○

16. Thinking of your company and the field today, with which companies would you avoid working? (Name as many or as few as you deem appropriate.)

_____
_____

17. During the past 18 months, with how may other private military companies has your company worked? (Subcontracted to/for, joint ventures, etc.)

None	1 – 5	6 – 10	11 – 25	More than 25
○	○	○	○	○

18. Why would you avoid working with a company listed above? (Select all that apply; you may choose different reasons for different companies.)

	Absolutely Critical	Very Important	Important	Somewhat Important	Not Important
They price too low.	○	○	○	○	○
You directly compete in the same space as them.	○	○	○	○	○
You have concerns about their credit problems.	○	○	○	○	○
You have concerns about legal issues.	○	○	○	○	○
You have not worked for them before.	○	○	○	○	○
You do not know them well.	○	○	○	○	○
You do not like entities with which they are connected.	○	○	○	○	○
They are not American-based.	○	○	○	○	○
They are not professional.	○	○	○	○	○
They are too high-profile.	○	○	○	○	○
They are not careful enough.	○	○	○	○	○
They are not well administered.	○	○	○	○	○
They do not hire well-qualified employees.	○	○	○	○	○
They cannot get the job done.	○	○	○	○	○

Section C – Future of the Private Military/Security Industry

19. In the future, do you think the industry will grow, shrink, or remain about the same? Why?

_____
_____

20. In the future, what services do you think will be most in demand and where?

_____
_____

21. Do you expect your client base to stay the same or change? If change, what changes do you anticipate?

_____
_____

22. Do you expect to compete against the same competitors in the future or will they change? If change, what changes do you anticipate?

_____
_____

23. What do you think are the biggest challenges the industry faces in the future?

_____
_____

24. What do you think are the biggest opportunities for the industry in the future? Why?

_____
_____

Section D – Additional Comments

25. Please share any additional comments you might have about the industry.

_____
_____
_____
_____
_____
_____

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- Strategy for Defense Acquisition Research
- The Software, Hardware Asset Reuse Enterprise (SHARE) repository

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- Moral Conduct Waivers and First-tem Attrition
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- Collaborative IT Tools Leveraging Competence
- Contractor vs. Organic Support
- Knowledge, Responsibilities and Decision Rights in MDAPs
- KVA Applied to AEGIS and SSDS
- Managing the Service Supply Chain
- Measuring Uncertainty in Earned Value
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