WINNING THE RACE

A CALL TO STUDY “GUANXI” AND ITS IMPLICATIONS FOR PUBLIC PROCUREMENT
BY DANIEL FINKENSTADT
“Going faster is not just a tag line for us; it’s a dead serious business about keeping the Air Force competitive and dominant.”

—Dr. Will Roper, assistant secretary of the Air Force for acquisition, technology, and logistics.

The United States is in a race for technology and defense dominance. This race is being run with a focus on acquisition speed—which at the same time maximizes the efficiency and effectiveness of deliverables.

Generally, acquisition speed is impacted by oversight and process flows designed to reduce uncertainty; however, the United States is competing for acquisition speed and effectiveness on an unequal playing field. America’s public procurement system faces constraints of public interest, competitive equity, and transparency—all of which are not overly concerning to autocratic regimes. It is therefore useful to explore how uncertainty plays into the procurement systems of other participants in this “race”—specifically near-peer adversaries like China—and how they compare with those of the United States.

This article offers potential research ideas—as well as possible implications from such research—for the study of the concept of “guanxi” for the U.S. public procurement system and businesses in this developing environment.

STRATEGIC ALLIANCES, CONTRACTS, AND UNCERTAINTY

Strategic alliances are built between parties to derive benefit while mitigating uncertainties at the behavioral and environmental levels, explains research published in 2016 by the Strategic Management Journal. According to this study, these uncertainties exist between exchange partners (behavioral) and outside of the relationship (environmental). Parties hope that their strategic alliance will help reduce behavioral uncertainty and the prediction error in environmental uncertainty. In both cases, however, a solid governance structure is needed. This governance structure is constructed across a spectrum ranging from “high trust”/“low contractual” to “low trust”/“high contractual.” (Refer to FIGURE 1 below.)

The 2016 study defines contractual governance as the “use of an extensive set of terms and clauses specifying mutual rights and obligations with legal and private sanctions for noncompliance.” Trust-based governance is, as stated, based on trust between the parties. Trust-based governance structures are built on the concept that exchange partners will not act within each’s own self-interest to the detriment of the other out of a sense of fairness or benevolence toward the other party. The study chiefly distinguished the measurement of each alliance as those that are heavily formally dictated (e.g., by contractual terms and conditions) or informally managed (e.g., via integrity or benevolence).

The study found that the effectiveness of contractual governance is highest at low/moderate levels of behavioral uncertainty and moderate/high levels of environmental uncertainty. The study also found that, in cases where both types of uncertainty.

FIGURE 1. SPECTRUM OF GOVERNANCE STRUCTURES

<table>
<thead>
<tr>
<th>HIGH TRUST/LOW CONTRACTUAL</th>
<th>LOW TRUST/HIGH CONTRACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informally managed (e.g., via integrity or benevolence)</td>
<td>Heavily formally dictated (e.g., by contractual terms and conditions)</td>
</tr>
</tbody>
</table>

---

Going faster is not just a tag line for us; it’s a dead serious business about keeping the Air Force competitive and dominant. —Dr. Will Roper, assistant secretary of the Air Force for acquisition, technology, and logistics.

The United States is in a race for technology and defense dominance. This race is being run with a focus on acquisition speed—which at the same time maximizes the efficiency and effectiveness of deliverables.

Generally, acquisition speed is impacted by oversight and process flows designed to reduce uncertainty; however, the United States is competing for acquisition speed and effectiveness on an unequal playing field. America’s public procurement system faces constraints of public interest, competitive equity, and transparency—all of which are not overly concerning to autocratic regimes. It is therefore useful to explore how uncertainty plays into the procurement systems of other participants in this “race”—specifically near-peer adversaries like China—and how they compare with those of the United States.

This article offers potential research ideas—as well as possible implications from such research—for the study of the concept of “guanxi” for the U.S. public procurement system and businesses in this developing environment.

STRATEGIC ALLIANCES, CONTRACTS, AND UNCERTAINTY

Strategic alliances are built between parties to derive benefit while mitigating uncertainties at the behavioral and environmental levels, explains research published in 2016 by the Strategic Management Journal. According to this study, these uncertainties exist between exchange partners (behavioral) and outside of the relationship (environmental). Parties hope that their strategic alliance will help reduce behavioral uncertainty and the prediction error in environmental uncertainty. In both cases, however, a solid governance structure is needed. This governance structure is constructed across a spectrum ranging from “high trust”/“low contractual” to “low trust”/“high contractual.” (Refer to FIGURE 1 below.)

The 2016 study defines contractual governance as the “use of an extensive set of terms and clauses specifying mutual rights and obligations with legal and private sanctions for noncompliance.” Trust-based governance is, as stated, based on trust between the parties. Trust-based governance structures are built on the concept that exchange partners will not act within each’s own self-interest to the detriment of the other out of a sense of fairness or benevolence toward the other party. The study chiefly distinguished the measurement of each alliance as those that are heavily formally dictated (e.g., by contractual terms and conditions) or informally managed (e.g., via integrity or benevolence).

The study found that the effectiveness of contractual governance is highest at low/moderate levels of behavioral uncertainty and moderate/high levels of environmental uncertainty. The study also found that, in cases where both types of uncertainty.
are low, contractual governance does not matter. The results show that at differing levels of uncertainty, there is essentially an inverted U-shaped effect—whereby contractual governance has no real effect at high or low levels (i.e., there is a balanced, contextual optimum). Contractual governance can be detrimental when both uncertainty types are high. In such cases, hierarchical governances are preferable and trust-based governance can have positive effects on the alliance outcomes.

These findings support the concept that informal relational governances, such as guanxi, may be contextually optimal—even when culturally unacceptable.

**GUANXI IN GOVERNMENT, EXPLAINED**

The concept of guanxi (pronounced “gwan-shee”) is a social philosophy that stems from Confucianism. In very simplistic terms, it is the idea that we are all relationally connected in a hierarchical series of concentric circles that originate with the family and spiral out to our friends and acquaintances. These relational circles are both predetermined (family) and voluntary (friends). (Refer to **FIGURE 2** below.)

Research published by the Strategic Management Journal in 2001 showed that guanxi is, in fact, utilized with government authorities. This study’s framework on guanxi considered three dimensions that affect guanxi utilization:

- Institutional (ownership structure and location);
- Strategic orientation (market effectiveness vs. operational efficiency); and
- Organizational factors (size, technology skill, management skill, length of operation).

The study found that organizational factors do not influence the use of guanxi with government authorities; however, institutional and strategic orientation considerations do influence its use with government authorities. This is not surprising, as most organizational factors are objectively considered in situations such as government procurement, licensing, etc.

In 1994, research published by the American Economic Review found that busi-

---

**FIGURE 2. SIMPLIFIED GUANXI CIRCLE DIAGRAM**

**DEVOTED FOLLOWER(S) (Ban-Di)**

- The inner core of one’s guanxi circle.
- It is the ring of “family ties” in terms of personal relationships; in organizations or business dealings, it is known as ban-di (“devoted follower(s)”)—i.e., those people who have the closest ties with you.

**PEOPLE INSIDE THE CIRCLE**

- Your close teammates, coworkers, etc.
- You and these people act as a buffer between those in these circles and those outside of them.
- These people are better at resource mobilization than those outside this circle.
- Simply put, employees are not wholly collectivistic in an organization—they are more committed to their guanxi circle (business unit, team, etc.), which centers on one leader. (Also known as a “clique.”)

**ACQUAINTANCES**

- Organizational members outside of your team, vendors, business associates, etc.

**STRANGERS**

- Those outside a guanxi circle—i.e., those “walled off” from conducting business with those inside.
- Carrying out favor exchanges and demonstrating trustworthiness and loyalty will build up relationships and allow entrance into others’ guanxi circles.

*Figure adapted from Luo Jar-Der, Social Networking and Chinese Indigenous Management (Cases in Modern Chinese Business) (Paths International Ltd., 2014).
necessities in China rely heavily on administrative interferences (influenced via guanxi) versus market mechanisms (i.e., competition). That same year, separate published research found that business-to-government guanxi relationships help guard against environmental uncertainties. This use of guanxi as a buffer to risk or uncertainty may be a primary reason for its use in business-to-government procurement scenarios, if one considers the literature on trust-based and contractual governance in strategic alliances.

This could have wide ranging implications for how Western cultures perceive such relational networks in formal business arrangements and contractual constructs—especially those in public procurement arenas where such relationships are normally frowned upon as “improper.” It would be interesting to hypothesize and test the institutional and/or procedural construct indicators that may lead to informal guanxi-type governance structures in environments where it presents overwhelming negative impacts (e.g., public procurement). These informal networks can develop over time in large public contractual arrangements, manifested as forms of reciprocity. Reciprocity emerges in areas such as:

- Future staffing picks on both the government and contractor sides,
- Incentive decisions for contractor performance based on previous agreements vs. periodic performance measures, and
- The desire to shift contract risk between parties based on previous concessions.

Understanding how these reciprocal relationships manifest can help managers avoid crossing from the gray of strategic alliance into the darker areas of unethical contracting behaviors and conflicts of interest (e.g., kickbacks, favors, gratuities, or gifts). It can also help the same managers understand the specific contexts in which certain types of trust governance mechanisms may be preferable to strict terms and conditions—or perhaps something in between. It becomes a balance between optimizing governance for acquisition efficiency versus maximizing public trust for effectiveness.

**Chinese and American Economics and Public Procurement**

To understand the effects of guanxi on strategic alliances in comparison with federal contracts within the United States, it is important to consider how the Chinese public procurement market compares to that of the United States, and to compare components of both nations’ public procurement systems. This comparison is important in terms of crucial public procurement measures such as transparency and corruption.

The most glaring difference between the two nations is their respective stances on democracy versus communism. This filters down into the level of economic freedom within each country. In the 2019 Index of Economic Freedom, published by the Heritage Foundation, China is ranked 100th out of 180 nations and is classified as “mostly unfree,” while the United States is ranked 12th and is considered “mostly free.” Country “scores” are a composite of 12 “quantitative and qualitative factors” across four categories:

- Rule of law—property rights, government integrity, judicial effectiveness;
- Government size—government spending, tax burden, fiscal health;
- Regulatory efficiency—business freedom, labor freedom, monetary freedom; and
- Open markets—trade freedom, investment freedom, financial freedom.

China has a complex and uneven regulatory framework and market system that is heavily influenced by state-owned enterprises. In contrast, the United States has a very detailed regulatory framework that, while extensive, provides for higher business, labor, and monetary freedom than in China. The United States also enjoys much freer and open markets.

These disparities do not necessarily exist in the public procurement frameworks of both countries as they are formally defined.

The People’s Republic of China enacted the Law on Bid Invitation and Bidding—in 1999 and the Government Procurement Law (GPL) in 2002. These two laws—“with their respective implementing rules”—constitute the regulatory framework for Chinese government procurement. The BL was primarily developed to reduce corruption and noncompetitive inefficiencies, but did not consider other public procurement targets—such as “value for money.” The GPL was enacted to increase procurement effectiveness and promote the development of a “clean government.” The GPL’s regulatory guidance is issued via the “bidding measure.” There is a noted degree of overlap and contradiction between the two Chinese laws that have caused some confusion in practice.

The United States established the Federal Acquisition Regulation System for the “codification and publication of policies and procedures for acquisitions”—and its “primary document” is the Federal Acquisition Regulation (FAR), along with agency-specific FAR supplements (e.g., the Defense FAR Supplement). Codified in Parts 1 through 53 of Title 48 of the U.S. Code of Federal Regulations, the FAR became effective in 1984 and has been revised frequently in response to new statutory requirements that affect procurement policy (e.g., small business regulations and environmental statutes). While confusion does arise, it is typically deconflicted at agency levels.

**Figure 3** on page 26 provides a detailed comparison of the Chinese and American public procurement systems. This comparison, though not all encompassing, clearly shows that, despite the wide difference in government constructs, the public procurement frameworks of the two nations are largely similar in spirit. This is important to understand when looking at the comparison of the effects of guanxi. Such a comparison is not necessarily overly...
OPTIMIZE PERFORMANCE

Your business has a vision. And every decision… every contract… can get you closer. CohnReznick delivers advisory, assurance, and tax solutions that help government contractors optimize performance.

Are you ready to achieve your vision? Let’s get going.

Visit us at cohnreznick.com/govcon

Contact:
Kristen Soles, Partner
Government Contracting Industry Leader
kristen.soles@cohnreznick.com
703.847.4411
### FIGURE 3. COMPARISON OF CHINESE AND U.S. PUBLIC PROCUREMENT COMPONENTS

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>PEOPLE’S REPUBLIC OF CHINA*</th>
<th>UNITED STATES OF AMERICA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Framework</td>
<td>▪ Bidding Law (BL), and</td>
<td>▪ Federal Acquisition Regulation (FAR), and</td>
</tr>
<tr>
<td>Objectives</td>
<td>▪ Efficiency,</td>
<td>▪ Satisfy the customer in terms of cost, quality, and timeliness of the product or service by—</td>
</tr>
<tr>
<td></td>
<td>▪ Effectiveness,</td>
<td>▪ Maximizing the use of commercial products and services;</td>
</tr>
<tr>
<td></td>
<td>▪ Reduce corruption.</td>
<td>▪ Using contractors who have a track record of successful past performance or who demonstrate a current superior ability to perform; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Promoting competition;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Minimize administrative operating costs;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Conduct business with integrity, fairness, and openness; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Fulfill public policy objectives.**</td>
</tr>
<tr>
<td>Oversight</td>
<td>Ministry of Finance.</td>
<td>▪ Office of Management and Budget (OMB), and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Office of Federal Procurement Policy (OFPP).</td>
</tr>
<tr>
<td>Funding</td>
<td>Fiscally based (tax revenues).</td>
<td>Fiscally based (tax revenues).</td>
</tr>
<tr>
<td>Established bidding procedures?</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Qualifications for prospective government contractors?</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Formal Solicitation procedures?</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Competitive negotiations allowed?</td>
<td>Yes, under GPL but not BL.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Simplified procedures (request for quotes)?</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Sole source (noncompetitive) procedures allowed?</td>
<td>Yes, under specific circumstances.</td>
<td>Yes, under specific circumstances.</td>
</tr>
<tr>
<td>Award criteria</td>
<td>▪ Lowest bid price (that satisfies criteria in solicitation).</td>
<td>▪ Lowest-price technically acceptable (LPTA).</td>
</tr>
<tr>
<td></td>
<td>▪ Most advantageous method (satisfies all criteria to the greatest degree).</td>
<td>▪ Full tradeoff—best value considering all criteria.</td>
</tr>
<tr>
<td></td>
<td>▪ Value-adjusted total evaluated price (VATEP)—evaluated price adjusted for offered benefits over/above stated minimums.</td>
<td></td>
</tr>
<tr>
<td>Contract termination allowed?</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Challenges, complaints, and remedies for prospective bidders?</td>
<td>▪ Yes, under GPL:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Inquiries (xun wen),</td>
<td>▪ Pre- and post-award challenges and protests.</td>
</tr>
<tr>
<td></td>
<td>▪ Challenges (zhì yì), and</td>
<td>▪ Formal contract disputes and alternate dispute resolution (mediation, etc.).</td>
</tr>
<tr>
<td></td>
<td>▪ Complaints (tòu su).</td>
<td>▪ Claims are also allowable under contracts.</td>
</tr>
</tbody>
</table>

*Data adapted from Fuguo, see note 18, at Chapter 15. ** FAR 1.101(b).
confounded by the wide system heterogeneity on the surface. This indicates that the effects of guanxi as a trust-based governance structure, or interaction with such a structure, may be discretely measured.

**INTERESTING QUESTIONS TO ASK AND IMPLICATIONS**

Guanxi is not unique to China, but it is not formally or culturally accepted in the United States—especially regarding public procurement. It is not codified into Chinese law, but it is understood to exist and is widely accepted in China. In the United States, it is possible, however, that informal, relational networks—like guanxi circles—may manifest in specific types of situations. The right questions need to be explored to aid understanding into the informal relational governance structures that may assist U.S. federal purchasing managers and prospective firms in developing optimum strategic alliances.

The United States should explore whether the varying levels of guanxi present in public procurement contracts in China result in varying levels of financial performance. This can be assessed similarly to the method and operationalization of variables detailed in the 2016 research previously discussed. These levels would be weighed under the construct of trust-based governance, while contract governance would still be measured based on the prevalence of terms and conditions.

Further, the United States should explore a way to measure impacts on the customer side of the procurement process, such as objective contract outcomes and perceptions of system integrity and transparency. Public procurement studies in the United States typically consist of measurable outcome variables, such as:

- Number of contract award protests, or
- Number of protests sustained (won by the complainant).

These measures point to most of the objectives found in American public procurement. These could be easily transferred to the Chinese system as proxies for efficiency and effectiveness. Anticorruption and/or transparency might lend themselves more toward latent variables, such as the customer or unsuccessful firms’ perceptions of fairness or integrity in the system and its processes.

### Existing Methods of Measurement

Measuring effects of guanxi in Chinese public procurement may be difficult, at least in terms of obtaining access to real data. However, pseudo-guanxi behaviors can be measured within U.S. federal procurement. For example, the “GRX Scale” could be applied to assess alliances between federal contractors and public procurement management teams. The GRX Scale represents three closely related "dimensions" of guanxi, as shown in **Figure 4** on page 28.

These measurements could be taken and compared for small (low-value) versus large (high-value) contracts, short-term versus long-term contracts, and across different contract types (research & development versus services, supplies, etc.). Knowing the degrees to which, and the levels at which, such relational networks exist could have wide-reaching implications for things such as oversight and monitoring, ethical considerations, conflict of interest breaches, or contract length considerations. As an example, if the U.S. government knows that informal guanxi relationships exist in a majority of its highly functioning, large contracts, then the government might want to encourage the “right amount” of trust-based governance while controlling for the negativities and uncertainties of guanxi using targeted contractual governance (i.e., special terms and conditions). Firms must also consider these implications when deciding to enter into alliances that best mitigate their own tolerance for behavioral and/or environmental uncertainty and increase financial performance.

### Implications

If the answer to the question is “yes, guanxi does improve the effectiveness and efficiency of Chinese public procurements,” then the United States may want to consider ways to overcome its inability to adapt this method in its own public procurement system, or find a balance of relational contracting that may be acceptable. We will never want to include nepotism in our source selections, but we may want to open the door to longer-term strategic alliances with trust-based governance. Findings from such a study could lead to additional research questions.

For instance, when the U.S. government procures goods and services in areas where guanxi (or similar networks) is present, should the government consider social connectedness as a risk factor in assessing local contractors? Informal networks have been used for U.S. government procurements conducted during contingency operations in the past. They have been leveraged to boost security (e.g., hiring local “warlords” for protection of supply channels through hostile territories) or as a means of encouraging goodwill from local reconstruction following destructive military operations.

Previous research into guanxi has proposed that it may be used in times when the parties cannot trust the “system.” The recent rise of “other transaction agreements” in U.S. public procurement shows a willingness to consider alternate governance structure models when necessary to overcome such distrust. Currently, the U.S. Department of Defense is working hard to create agreements and terms for nontraditional defense contractors to entice them to enter the U.S. defense market because they are either unaware of the processes involved or do not trust the system to protect their interests:

From industry’s perspective, the breakdown in industry-government
communications, adversarial relations, and distrust that the government will do the right thing may well be the worst seen since the advent of acquisition reforms in the early 1990s.28

Lessons from China may help us understand the right balance in informal governance when these types of degradations in trust persist.

If the answer is “no, guanxi does not improve the effectiveness and efficiency of Chinese public procurements,” then the United States can better understand the global competition, and bolster advocacy to prefer contract governance over trust-based or relational governance in public procurements. Considering the similarities in procurement systems between China and the United States, the prevalence of guanxi in China is a ripe area to study the contrasts of such structures. Firms would also want to understand the tolerance for such alliances to strategically position themselves to be more competitive and succeed in future performance evaluations based on a degree of informal networking.

CONCLUDING REMARKS

Guanxi demonstrates a governance structure that is less formal than those traditionally found in the United States, but may be no less or even more effective in strategic alliance results. There is an abundance of unanswered research questions related to guanxi in public procurement settings that could have implications for Chinese and U.S. institutions and firms. This is an exciting field of study that has not yet penetrated American public procurement literature.

There are, of course, downsides to guanxi in terms of Western cultural values (e.g., the unfairness of nepotism). Some action may be needed to build trust in the system while others may be needed to simply overcome inefficiencies in the system. All of this has to be weighed against the risk of increasing opportunism by parties. When guanxi is too powerful, it can override other forms of noncoercive buyer influence that may be more appropriate.29 In the end, there is much to be learned from understanding the degrees and benefits of informal hierarchical and trust-based governance structures on differing levels of behavioral and environmental uncertainty found in the public procurement domain; a domain that has traditionally relied on mitigation via less flexible contract governance.

Hopefully, such lessons can open the minds of federal acquisition authorities as to the benefits of international marketing research as we seek to “win the race” for defense dominance. We need to—as Assistant Secretary Roper said—“do business at the pace of relevance.”30

---

FIGURE 4. THE GX SCALE*

*Adapted from Yen, et al. (see note 24).

Ganqing (“feelings”)

- The emotional side of guanxi.

Renqing (“sympathy/favor”)

- In guanxi terms, the concept of renqing is similar to owing someone a favor in an American context, or “wining and dining” a client.
- Practicing renqing creates positive ganqing, while deliberately refusing the favor or refusing to return the “owed” favor effectively terminates the guanxi between the parties.

Xinren (“trust”)

- Represents the “trust, reliance, credence, belief, and dependence” that exists in the guanxi between parties.
- Xinren develops over a period of time through repeated activities and interactions—i.e., strongly developed and repeated ganqing and renqing.
- Generally speaking, the stronger the xinren, the stronger the guanxi.

NCMx™ COLLABORATE

Post about this article on NCMA Collaborate at http://collaborate.ncmahq.org.
The views expressed in this article are those of the author and do not reflect the official policy or position of the U.S. Air Force, Department of Defense, the U.S. government, or NCMA.

The author would like to thank Professor Jan-Benedict Steenkamp of the University of North Carolina at Chapel Hill for his remarkable expertise and unwavering support in this and many other ventures. He would also like to thank Professor Robert Handfield of North Carolina State University for providing expert advice into Chinese supply chain management.

ENDNOTES

1. As quoted within Amy Christopherson; “Faster, Smarter: Speed is Key in Acquisition Reform”; Air Force News Service (February 28, 2019); article on Assistant Secretary Will Roper’s speech at the Air Force Association’s Air Warfare Symposium in Orlando, Florida, on February 27, 2019; available at: https://www.af.mil/News/Article-Display/Article/1771387/ faster-smarter-speed-is-key-in-acquisition-reform/.


3. Ibid., at 2522.

4. Ibid.

5. The literal translation from Mandarin is “connection.” In this context, it is generally defined as “the system of social networks and influential relationships which facilitate business and other dealings.” (Definition of guanxi, Oxford Living Dictionaries, Oxford University Press, available at https://en.oxforddictionaries.com/definition/guanxi.)


10. John Child, Management in China During the Age of Reform (Cambridge, UK: Cambridge University Press, 1994). (John Child is a British scholar, author, and organizational theorist. He is a professor of commerce at the University of Birmingham, as well a professor of management at Plymouth University.)

11. Based upon institutional knowledge of the author.

12. The shift of contract risk is often confused with contract “consideration,” which is an allowable trade-off of cost/benefits between a government agent (on behalf of the government) and a contractor for cost/performance obligations that are temporarily relieved by the government.


19. Ibid., at 329.

20. Ibid.

21. FAR 1101.

22. Park and Luo, see note 8.


27. An other transaction agreement is defined as “an acquisition instrument other than a grant, cooperative agreement, or contract. Under the authority granted by 10 U.S.C. 2371, the U.S. Department of Defense may enter into these transactions to carry out basic, applied, and advanced research projects.” (Desktop Guide to Contract Management Terms (Ashburn, VA: NCMA, 2019).)


30. As quoted within Christopherson, see note 1.

MAJOR DAN FINKENSTADT

» Currently an active duty contracting officer (U.S. Air Force) and PhD candidate in Marketing at the Kenan-Flagler Business School, University of North Carolina at Chapel Hill

» Has over 16 years’ experience in public procurement with the U.S. Air Force and has published multiple articles related to a wide range of topics in this field.