LEADING AGILE ACQUISITIONS

A Guide to Creating Culture Change in
Government Contracting

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For my mother, whose belief in me was unwavering and constant, providing a foundation of confidence and hope that has guided me through every challenge and triumph. For my father, whose steadfast support and unwavering presence has been my backbone, always there to catch me when I faltered and to push me forward when I doubted. And for my wife, whose endless support and wise words have been a source of strength and clarity, helping me navigate through life's complexities with grace and wisdom. This book is a testament to the love, guidance, and encouragement you have all bestowed upon me, shaping me into the person I am today. Your influences are etched into every page, a tribute to the roles you've played in my journey.

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Preface

Like so many kids, I can remember running around my backyard playing "contracting officer and requirements owner" dreaming of the day I could take my oath and begin my career as an 1102 Acquisition Professional… That is not right. In fact, like most people who end up in contracting, I did not know that job even existed and stumbled into it through plain luck and some good advice.

As a kid, I dreamed of being an actor and even gave it a try. Since you are reading this, you can probably guess it was with very little success. Instead, I went the more traditional route and attended a four-year university after high school. I majored in business with a concentration in marketing. Even then though, I knew sitting behind a desk working for a corporation was not what I wanted to do. I got my personal training certifications and a job at Merritt Athletic Clubs. I worked my way up to Head Trainer and eventually Operation Manager. On the side, I started a private in-home training company. Things were going great. The in-home business was taking off, and I was making incredible money (for someone my age). So why am I writing a book about agile acquisitions instead of training celebrities for an upcoming movie? To answer that, I need to take a step back.

I met my wife Jenn, as a lifeguard at the YMCA in the spring of my junior year of high school. She oversaw training me (and she still is). It was love at first sight. I went to my friend's house that night

and told him I met the girl I was going to marry. We began dating and though she went off to college eight hours away, we continued dating, ultimately coming back together physically to both finish our undergraduate degrees in Baltimore, MD. As our relationship matured, I recall my to-be father-in-law asking me how I intended to support his daughter. Not that she needed to be supported. Jenn is incredibly smart and capable, but this is the sort of thing any concerned father would want to know. I assured him I had a budding personal training business and was making great money. He left it with a sort of unsatisfied, "okay." Unfortunately for me, and what he probably already knew, I had a faulty business plan. I was one person and did everything myself. So as my business grew, I was working from 3:00am to 9:00pm almost every day. There was no room to take on more clients, and I was not wise enough to hire people. Then one December, all my clients took off for the entire month. I made zero dollars. We were staying at my in-law's house so the fact that I was not working was abundantly clear. Again, my father-in-law asked me how I intended to support his daughter. My response was, "Yeah, I am wondering that myself."

My father-in-law was in the Air Force (AF) and stationed at what was then called the National Intelligence Mapping Agency (NIMA). He had previously worked in contracting but had moved onto another role. He told me about a hiring opportunity at the agency in the contracting department. "No pressure," he said, "but if you are interested, I can get you on the list to attend." My own father had served in the Army and worked in the federal government. I saw the pride he had in his work and what a stable career path it could be. I was steeped in American pride and serving my country. So, the idea had merit. II was considering going back to law school and as I read about what a Contracting Officer (CO) did, it seemed

like a reasonable path. I took the interview and was offered a position in the paid intern program. I was ecstatic. I just had to wait for my security clearance. Clearances took anywhere from 6 to 12 months. My excitement was quickly replaced with anticipation and fear. What if I never got my clearance? I continued my personal training business and waited. After almost a year of waiting, I had all but given up on the idea. I was going to be married soon and I needed to begin my career. My wife and I went to lunch to discuss the idea of both of us enlisting in the military together. Just as we agreed to do it, my phone rang. It was NIMA, they had approved my clearance and wanted me to start right away. This was incredible timing, or maybe divine intervention. While I wanted to serve, we both agreed I should take the job. This was just the first of many serendipitous turns of events in my life.

I started my job as an intern contract specialist, buying laptops and printers. My excitement was quickly replaced with frustration and boredom. The job was mind-numbingly easy and the tools we had to do the job were painfully frustrating. The contract writing system we had was clunky. In addition to being a slow and unintuitive system, there were things it just could not do, like free edit text. So frequently the system auto-populated the wrong text that every contract person had a bottle of white-out on their desk. We would print the contract, white-out the wrong information, and then put it into a typewriter to add the correct information.

This was my first, but certainly not my last, taste of bad technology. The system made my job harder than it needed to be. At this point, I thought, what could I do about it? Everyone just accepted it as the way it was. And so did I. Thankfully, I began to see there was another way. A better way.

Introduction

The federal acquisition system as it stands today, is a bloated, slow-moving, and out-of-date behemoth. Established in the early 1980s, this system, shrouded in a risk averse culture, has become a growing liability. This is bigger than bureaucratic inefficiency or the occasional media headline about spending mishaps. The real issue is far more critical – it's about our national capacity to remain competitive and secure in an age of rapid technological change.

Everywhere we look, technology is advancing at an unprecedented rate, but our government's acquisition system is stuck in a slow, cumbersome process that was designed for a different era. This sluggishness isn't just inconvenient; it's a direct threat to our national security and well-being. In the global arena, where technological superiority often dictates economic and military dominance, falling behind isn't an option – it's a direct path to vulnerability.

The problem is pervasive and impacts all facets of government. From healthcare to our military, from education to infrastructure, every federal agency is hamstrung by this outdated system. The result? Slower response times, missed opportunities for innovation, and a general inability to leverage the best tools and technologies to serve the U.S. public effectively. The complexity of the federal acquisition process makes the market generally accessible to only a small number of established very large businesses specializing in acquisition which largely reflect the government's own bureaucracy.

Despite talking points around attracting new companies, recent trends show small businesses exiting the federal marketplace at an alarming rate, taking with them innovation and agility.

This is a clarion call for reimagining the federal acquisition system and how we use it. We need to break free from the chains of outdated procedures and usher in a new era of agility, efficiency, and innovation. The cost of inaction is too high as we are compromising our nation's ability to lead, protect, and thrive in a rapidly evolving global landscape. The time for bold action and transformative change is now.

This intricate world of federal government acquisitions was not created overnight. It is the cumulative result of decades, a labyrinthine structure built on layers of rules formulated to rectify past missteps. Numerous companies, individuals, and organizations tirelessly work towards reforming the federal government. However, overlooking the historical complexity of this system often leads to substantial resource expenditure with minimal returns. My focus on promoting agile acquisitions and agile development practices in federal projects does not stem from an unwavering belief that it is the ultimate solution. Rather, it is driven by the conviction that our current methodologies are markedly inadequate. The primary allure of agile exists in its modularity. Agile allows for breaking projects into smaller, more manageable segments with correspondingly lowered costs and fewer commitments. This approach inherently limits the magnitude of potential failures, which alone could justify its adoption in government IT.

The intricate bureaucratic processes in federal acquisitions are designed to mitigate risk and prevent fraud. If we could substantially

reduce risk through alternative means, it would become feasible to dismantle the bureaucratic barriers currently dictating procedures. Challenging these processes on the grounds of their diminishing relevance holds more promise than contesting them over their resource-intensive nature. Demonstrating the effectiveness of alternative methods, acquiring momentum and visibility over time, is key. For instance, the traditional process of managing government project costs and schedules, the Earned Value Management (EVM), ignores the realities of modern technology development. The incentives of EVM's focus on highly specific deliverables over extended timelines clashes with today's rapidly evolving tech landscape. In a world where technology predictions falter beyond a few months, and adaptability is key, traditional models like waterfall development render government IT obsolete, like receiving a cell phone designed seven years ago in today's world.

This book delves into the transformative world of agile acquisitions in the federal government, guided by **three core principles of innovation:** belief in change, a deep understanding of rules and regulations, and responsible risk-taking. Each chapter is meticulously crafted to not only explain both the what and how of Agile acquisitions, as well as the why behind this necessary shift. I've written this book for all government acquisition professionals—and importantly, those professionals who work closely with contracting officers, such as technical experts, program and project leads, or senior leaders—to inspire and guide our federal acquisition workforce in moving to a new era of government contracting. My goal is that together we can create a culture change in how we buy products and services for federal agencies in a way that ensures we meet our missions as quickly as the ever evolving landscape of the commercial world. This book will provide you not only an

approach for how to make federal contracting more effective and faster, but also shares some of my personal experiences, both painful and exciting, in trying to do so. In fact, you will find some passages in this book that describe in detail my professional experiences in a way intended to illuminate your own professional journey in adopting an agile approach. I hope my lessons learned are helpful to you, as well.

In this book, we explore the power of believing in change. This is where the cultural aspects of contracting, and leadership come into play. The book discusses the importance of adopting a mind-set that welcomes change, supported by examples and strategies for effective change management. These chapters emphasize the necessity of a cultural shift within government entities to embrace more flexible, responsive procurement methods.

We will delve into the intricacies of federal acquisition regulations (FAR) and contracting complexities. This will provide a comprehensive overview of the current rules and regulations and suggest innovative solutions to navigate these often-complicated pathways. These chapters are designed to give readers a robust understanding of the existing system, equipping them with the knowledge needed to navigate and reform these structures effectively.

And I highlight the importance of responsible risk-taking through agile acquisitions. This section contrasts agile with traditional waterfall acquisition methods, illustrating how agile approaches can lead to more efficient, effective outcomes in government projects. It covers various aspects of agile methodology, including roles, responsibilities, contract types, and the importance of measuring delivery through key performance indicators.

Throughout the book, the emphasis is on not just adopting new methods for the sake of innovation but doing so with a clear understanding and respect for the existing rules and regulations, coupled with a calculated approach to risk. This balanced perspective is critical to driving sustainable, impactful change in the federal acquisition system. The ultimate goal of the book is to guide readers through the complexities of government acquisitions, empowering them with the tools and insights to drive forward a more agile, efficient, and responsive government.

Acquisition, A Foundation to Innovation

In my diverse career journey, spanning roles from a contracting intern to a leader in innovative defense technology startups, I have gathered a wealth of experiences that have shaped my understanding and approach to innovation. This journey has taken me through the intricate world of government contracting, the exciting realm of agile methodologies, and the exhilarating landscape of cutting-edge technology startups. Each role, challenge, and triumph has contributed to my perspective on how to drive meaningful change in complex systems.

I have seen first-hand the powerfully limiting constraints of government processes, policies and procedures that ensure we are stuck in a by-gone era. Of our inability to buy the best technologies to help us get strategic advantage. Of sticking with processes developed decades ago, that slavishly follow contorted steps as that is how we've always done things. Of failing to use new tools that can assist us.

Innovation in government means doing things differently, finding new ways to succeed, trying and sometimes failing at new efforts but learning in the process, to meet missions as fast as possible. Innovation helps the government do its job better—and ensures that we find ways to be more effective, more efficient, accomplishing more and delivering results to the American people. By trying new

ways to shorten processes, to speed our ability to achieve results, to question the usual byzantine way of doing business, we can improve the results of our mission focused efforts. Innovation in government is not just about buying technologies, but also includes rethinking our processes and policies, updating our strategies to meet new mission challenges, examining and leveraging our stakeholders and ways of communicating with them, and revising our products and services to increase our ability to do our missions effectively.

The speed at which the government frequently operates, or lack thereof, impedes our national security and ensures our adversaries, and the societal factors federal services must address, have an inherent advantage over us, making our jobs as federal workers protecting and building our nation even harder. And by continuing to use outdated processes and systems designed in and for the last generation, we are missing the opportunities to leverage what we've learned in the last few decades, the technologies that have been developed, the lessons learned in previous conflicts in and in national emergencies. We can and should do better at delivering for the American people. And using innovation helps us do so.

Innovation in acquisition is fundamental to creating new innovation elsewhere. If we can't buy the best products and services from the commercial sector to benefit the government, we fail to leverage the power of our nation's productivity, creativity, and entrepreneurial nature. The US commercial sector since World War II has been a powerhouse in assisting and even driving the government's ability to meet mission challenges. And the resulting partnerships and interwoven relationships between industry and government have made us the global force we are today. Acquisition

is the cornerstone of leveraging the best from industry to benefit the government.

Government acquisitions, however, have traditionally been one of the least innovative aspects of federal work. And for very good reasons. Government functions using federal taxpayer dollars and using those taxes wisely and reasonably is one of our most fundamental responsibilities. Being methodical, careful, and measured in how we spend taxpayer dollars is central to maintaining legitimacy. The vast array of laws, rules, processes, and procedures that govern how taxpayer dollars are spent developed over decades to ensure protection of these funds. And the people hired to manage and oversee how funds are spent have one of the gravest responsibilities within government. No wonder innovation in acquisition or trying new ways to speed purchase of commercial products and services, has been seen as irresponsible or even dangerous, with the potential of landing federal acquisition workers in legal trouble.

However, in recent years, there is growing recognition that speeding the government acquisition process is essential to innovation. And there has been an array of very smart folks at work in Congress and at our federal agencies to ensure that the laws and regulations governing how we spend federal dollars have evolved to keep up with our ever changing world.

The Three Principles of Innovation

My experiences in the federal acquisition world forced me to seek out and learn from what these smart folks have done to revise our federal contracting construct. I read, learned, and began to navigate the new rules and laws that have been developed, finding new ways

to do the traditionally difficult work of federal acquisition. And I heard from many federal colleagues and their lessons learned in the challenges they faced in buying for the government.

These varied experiences have crystallized into what I term the "Three Principles for Innovation," a distilled essence of my learnings and insights. These principles are not just theoretical concepts. They are practical, hard-earned guidelines forged through real-world experiences, trials, and successes. They represent the culmination of my journey in understanding what it truly takes to innovate effectively in environments resistant to change. And they form a framework for thinking about the ideas presented in this book, which I'll refer to throughout the book.

> **<u>Believe in the Possibility of Change:</u>** The first principle is a fundamental belief that anything can and should be done differently. This mindset, seeing the transformative power of change, is crucial for innovation, especially in an environment often perceived as rigid and resistant to change like government bureaucracy. Creating change within a large organization goes beyond operational or structural updates, demanding a fundamental shift in the organizational culture. This cultural evolution is essential to foster an environment of innovation.
>
> It is having a vision beyond the current way of doing things and the conviction that improvements are always possible. The key element for putting this principle into action is leadership. It isn't enough to believe; you need others to believe and act. It's about creating a space where new ideas are actively sought after, not just accepted, where challenging the status

quo is encouraged, and where calculated risks are seen as integral to progress.

Establishing a culture conducive to innovation requires cultivating a collective mindset. Every member of the organization understands their role in contributing to broader change and improvement. It's about promoting curiosity, encouraging exploration, and ensuring that setbacks are viewed as valuable learning opportunities rather than failures.

Innovating in an organization is like gardening an established forest. Just as a gardener doesn't plant new seeds and hope for the best, innovation requires more than just new ideas. You have to nurture the entire ecosystem. Existing trees are like the established practices and mindsets in an organization, deeply rooted and dominant. To introduce new growth, you can't just plant seedlings where there's space; you need to cultivate an environment for them to thrive—ensuring the soil is fertile, there's sunlight, and existing trees don"t overshadow new plants.

Similarly, in an organization, cultivating a culture of innovation requires preparing the soil of the organization — its culture, policies, and attitudes. It's about making sure there's sunlight — support from leadership and access to resources. And importantly, it's about ensuring the older trees — established practices and mindsets — don't stifle the new growth but instead are pruned and adjusted to coexist and support the new, innovative ideas.

Deeply Understand the Rules and Regulations: This principle emphasizes the importance of a deep understanding of the rules, regulations, policies, and procedures that govern the thing you wish to change. In government contracting, this means having a thorough knowledge of the Federal Acquisition Regulations (FAR), agency-specific policies, statutes, and other relevant guidelines. Understanding the intricacies of these laws and regulations is essential for navigating the system effectively and identifying opportunities for innovation within the established framework.

It's like being a chess master. In chess, to innovate and outmaneuver your opponent, you first need to thoroughly understand the rules, the strategies that have been used historically, and the conventional wisdom that guides players' moves.

Similarly, in innovation, to effectively change a system, process, or product, you must first understand why it operates the way it does. You must be able to separate the rules from tradition. When someone tells you that you can't do something you should ask where the rule is that says that. This expertise requires a commitment to continuously staying updated with changes and developments. Just as a chess player must be aware of their opponents' strategies and stay ahead of the game, an innovator must be acutely aware of the evolving landscape within which they operate.

Knowing the rules inside out also means recognizing when you've reached the limits of your expertise. In chess, this might mean consulting with a coach or analyzing games of grandmasters. In the world of innovation, this translates to

knowing when to seek out subject matter experts who can provide deeper insights or specialized knowledge that you may lack.

Understanding the foundational rules and structures deeply equips you with the power to think creatively within them, bend them, or even rewrite them where necessary. It's about mastering the current game to excel in playing it differently.

<u>Responsibly Take Risks:</u> The third principle of innovation is responsible risk-taking, which is fundamentally intertwined with a deep understanding of the rules, regulations, and policies that govern the domain you're aiming to innovate in. This principle emphasizes that taking risks is a critical component of innovation, but it's not about reckless gambles. Instead, it's about calculated, informed risks that are taken with a full understanding of the potential consequences and the existing framework.

Innovators must know how to push boundaries without crossing lines. This requires a keen understanding of where the guardrails are, enabling one to operate as close to the edge as possible without overstepping legal or ethical boundaries. It is about knowing when and how to challenge the status quo responsibly, and knowing what is at stake. It's about knowing which rules can be bent, which traditions can be broken, and what must be adhered to, ensuring that the innovation delivers positive outcomes without causing harm or unintended consequences. This approach not only maximizes the chances of success but also maintains the integrity and sustainability of the innovation process.

Think of it as a tightrope walker who performs breathtaking feats high above the ground. This performer doesn't simply climb up and hope for the best. They understand the physics of the rope, the dynamics of balance, and have a deep respect for the risks involved. They train rigorously within the safety parameters before attempting anything new or daring. In the same vein, an innovator must deeply comprehend the existing structures and limitations they're dealing with. This knowledge allows them to identify where and how they can push boundaries without causing detrimental effects.

Becoming an Acquisition Innovator

For much of my career, I have held the title of Bureaucracy Hacker. Despite the cool name, innovation in government contracting rarely involves "hacking" bureaucracy; it's more about understanding it thoroughly. When you understand the system, you can navigate it more efficiently. You learn to leverage the rules to your advantage and recognize when and how to use exceptions. The FAR, for instance, is a voluminous document, but its prescriptions are often more about how to do things rather than prohibitions. Even where it says something cannot be done, exceptions are provided.

It is important to recognize the potential consequences of trying to circumvent the process. Breaking established processes or bypassing them might yield short-term gains but often leads to greater complexity in the long run. Bureaucracies are like living organisms which adapt and develop defenses against unorthodox methods. Much like an immune response, which leads to a dramatic and sometimes painful reaction, bureaucracies often respond with the creation of new rules and increased oversight. The political

capital spent on such endeavors can be substantial, and once you "break glass," repairing the damage and restoring trust can be a significant challenge.

Of course, in situations where urgent needs justify unorthodox approaches, such as ensuring people receive critical benefits or services, breaking glass might be warranted. However, it's crucial to be mindful of the long-term implications of such actions and the difficulty in repairing the aftermath.

Innovating within the confines of government contracting requires a balance of <u>creativity, a deep understanding of the system, and a careful approach to risk-taking</u>. It is about working within the system, leveraging its rules, and understanding its limits to bring about meaningful change.

The path to innovation is neither linear nor easy. It is a journey marked by continuous learning, embracing change, and challenging the conventional. Through my experiences, from the initial forays into the traditional realms of procurement to the pioneering adoption of agile practices, I have learned that innovation is as much about mindset as it is about methodology. It requires a willingness to question, to explore, and to take risks. My journey has shown me that with curiosity, resilience, and a commitment to excellence, it is possible to drive meaningful change, even within the most structured environments. This chapter is intended to be a beacon for those who seek to bring innovation to their fields, encouraging them to push boundaries, to think creatively, and to remain steadfast in the face of adversity. The road to innovation is ongoing, and this chapter is just the beginning of a larger story of

transformation and impact. Before we begin on this journey, we need to take a moment to understand where we are going and why.

What is Agile Acquisition?

If the acquisition takes longer than the release of the Minimum Viable Product (MVP); you are doing it wrong...
If your user training takes longer than your user engagement, you are doing it wrong...
If your first release to real users takes longer than your fiscal year, you are doing it wrong!

Agile acquisitions are an approach to government purchases that makes the acquisition process faster, more flexible, responsive to the purchaser's needs and which takes advantage of the wide panoply of acquisition authorities provided in the federal government. Agile acquisition has its origins in the process improvement methodologies of the Toyota Manufacturing System, which governed production of automobiles, in Japan in the 1950's. The approach used by Toyota to streamline and improve their production lines touched off an awakening in the US for how to improve industry production and process, resulting in wave after wave of methodologies popularized and spread throughout industry and project management in the 1990's and 2000's in the US, to include lean development. Finally, agile approaches, which deliver in an iterative manner, began to infiltrate thinking in government acquisitions in the 2010's.

Agile acquisitions redefine the perception of procurement processes, challenging the belief that they must be rigidly bureaucratic. The agile acquisition approach simplifies governance of the

acquisition process, while still addressing essential elements such as cost, schedule, technical, business, and management aspects. It aims to minimize the resources and efforts required from both the industry and evaluators, focusing on a more streamlined and effective procurement process.

It proposes that many of these procedures are self-inflicted and that with a thorough understanding of statutes and regulations, the inherent flexibilities within these processes can be effectively utilized, leading to greater efficiency.

Agile acquisitions is about tailoring acquisition processes to align closely with the highest priorities of stakeholders, ensuring that their objectives are met effectively. The core of agile acquisitions is crafting an acquisition strategy and plan that prioritizes efficiency and mirrors the waste-elimination principles of Lean Development. This approach involves discerning and adjusting various aspects of the procurement process. It's a dynamic approach, continually adapting to provide the most value in the present context. For example, a requirement owner may prioritize speed over competitiveness, cost over time, or long-term flexibility over immediate delivery, depending on the mission needs. These adjustments act as strategic levers to fine-tune the acquisition strategy, ensuring it aligns with the desired outcomes. In essence, agile acquisitions are about understanding and responding to the evolving needs of stakeholders, prioritizing their most urgent requirements, and not being constrained by historical precedents.

What is Agile Contracting?
Agile contracting focuses on enabling the delivery process rather than controlling it through rigid contract stipulations. This approach

ensures that contracts enforce the fundamental elements of scope, period of performance, and price, while allowing technical requirements to be managed outside of the contractual agreement. The technical requirements should be managed outside of the contract to provide maximum agility to the project and Product Owner (PO). This flexibility is vital as it's virtually impossible to anticipate every requirement or circumstance during the contract drafting phase. Therefore, attempting to encompass all eventualities within the contract itself is impractical and counterproductive.

Agile acquisitions and agile contracting, while closely related, have distinct focuses within procurement and project management. But in essence, agile acquisitions are about the broader process of agile procurement, while agile contracting zeroes in on the legal frameworks that enable and support this methodology. Comparing and contrasting both agile acquisition and agile contracting allows the differences between the two to quickly emerge.

Agile acquisitions encompass the overall process of procuring goods or services, including need identification, market research, creating solicitations, and selecting vendors. This approach emphasizes flexibility, adaptability, and iterative deliveries, with a focus on delivering value and responding quickly to changing requirements and technologies. The essence of agile acquisition lies in ensuring that both parties' rights are protected, and all pertinent statutes and regulations are adhered to, without unnecessarily burdening the contract with excessive detail. Traditional Statements of Work (SOWs) often dictate precisely how a contractor should deliver a product, which can stifle innovation and overlook the rapid pace of technological change.

In contrast, agile contracting specifically refers to the contractual aspect of this process. It involves drafting, negotiating, and managing contracts that are tailored to support agile methodologies. These contracts differ from traditional ones by being more flexible, accommodating changes in technical requirements, deliverables, and timelines. They require a deep understanding of agile projects and often include language encouraging regular reviews and adjustments, emphasizing collaboration between the client and vendor.

Agile contracting documents should empower the PO to adapt to technological advancements and evolving user needs while safeguarding the interests of both the contractor and the government. By focusing on the broader objectives and allowing for adaptability in the methods of achieving them, agile contracting creates a more dynamic and responsive framework. This approach is especially crucial in fields where technology and user requirements evolve rapidly.

The Traditional Acquisition Process

In understanding why agile acquisition is such a critical approach for the government to fully embrace, it's valuable to reflect on how federal acquisitions have occurred in the past.

Imagine you are a requirement owner at a government agency. You joined the agency because you wanted to make a difference, serve your country, and help your fellow citizens. After receiving your annual budget (a process started two years ago), you are finally executing on the program objectives. You identify a critical program need and decide to invest in the new capability. A quick email to

your Contracting Officer (CO) to make your request returns a list of tasks you must complete before the acquisition can begin.

You are instructed to conduct market research to understand what capabilities (if any) currently exist, build an Independent Government Cost Estimate (IGCE), and draft your Statement of Work (SOW). The SOW must detail exactly what you need, how it must be delivered, and all known constraints and assumptions. Amidst your other daily activities of your job, you get to work on the required documents. After a couple of months of toiling away, you are done crafting the SOW, or so you think. You send the documents to the CO only to find that you did not use the current template for the SOW, your requirements are too generic, your market research is considered incomplete, and your IGCE exceeds your budget. After several rounds of this, and several months, you finally have what is deemed an acceptable requirements package.

From here your requirement goes into a sort of "black box" where you have little insight into what is actually happening. But what is happening is the CO is crafting the acquisition strategy and RFP, and not just yours; they are working on several others and managing the administration of dozens of ongoing contracts each with modifications, performance issues, and general administration activities.

After a few months, you email your CO again and ask for an update. The package is now with the legal office getting reviewed. Another couple of weeks go by when you finally receive another email. It is your entire requirement package redlined from the CO and the attorney with changes that need to be made before the acquisition can move forward.

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After multiple exchanges and rewrites, in six months the package is complete and ready to go. The Request for Proposal (RFP) gets posted on SAM.gov, the government Point of Entry (GPE), with a response time of 30 days. The Questions and Answer (Q&A) phase is five days and sure enough you receive over 100 questions. It is your responsibility to answer these questions and there is an associated day for day slip in the proposal response due date. After a week of working through the questions, you send them back to the CO. The answers must now be approved by both the CO and the attorney before being released. Some questions/answers actually required revisions to the requirement documents, so those need to be updated and approved as well. Once complete the answers and revised documents are uploaded to the GPE along with an extension to the submission date. Another 30 days go by and five proposals are received. The CO spends the next week reviewing the proposals for compliance and you and your evaluation team are finally authorized to begin your review.

Now faced with five volumes per proposal, culminating in hundreds of pages to review against the evaluation rubric, your team is sequestered in an uninspiring room and begins reading. What starts with a bit of excitement quickly devolves into feeling overwhelmed. The highly specific requirement documents have forced all of the vendors into proposing essentially the same solution. Price is supposed to be the least important factor but looking at the technical volumes feels like choosing between paint colors for a bathroom renovation; argyle purple, shadow purple, twilight purple…

Finally, after months of review, the team has selected a winner. You draft your recommendation letter to the Source Selection

Authority (SSA). Unfortunately, legal has questions about some of the weaknesses you identified, the CO identified bias towards the incumbent, and the SSA wants stronger language supporting your decision. Another couple of weeks and you finally have agreement, **just nine months after you started this journey.** The vendors are notified and debriefs are scheduled. Fortunately, there are no protests so the team can get right to work. The first capability is scheduled to be delivered in five years.

Some of you may be reading this thinking that it is a crazy hyperbole, but I am willing to bet that anyone who has worked in acquisitions of software development is starting to twitch thinking about the countless times they have lived through this exact scenario. It is not an exaggeration, if anything, it is a conservative representation of reality. This is the acquisition process that serves as the backdrop for technology development and general acquisitions in the federal government.

The problems in the story I've told here are not about the rules of procurement. Rather, the problems lie in the culture of procurement. The flawed approach is the linear and sequential processes, the lack of transparency, and the belief that you need to define outputs before you start the acquisition process. You are doomed to fail in purchasing the best and most recent industry advances before you've even begun the acquisition process. This is why agile acquisitions and agile development are such an imperative.

Why We Need a New Way in Federal Acquisition

When I first embarked on my journey as a contracting professional at the National Geospatial-Intelligence Agency (NGA), formally

National Intelligence Mapping Agency (NIMA), I quickly learned that two principles were paramount: first, my duty to prevent fraud, waste, and abuse, and second, the sobering reality of being personally and professionally liable for every decision I made. These were not just guidelines; they were the bedrock of the profession.

However, as a young intern, just starting out with a new family and a mortgage that stretched my finances, the suggestion that I should also invest in professional liability insurance felt overwhelming and felt wrong. The financial burden seemed immense, and it led me to question why such a responsibility fell on my shoulders. More than a budget concern; it was a fundamental concern about the culture I was stepping into.

These principles, while valid, painted a picture of a work environment shrouded in caution and apprehension. How could I, or any contracting officer, be expected to innovate or take responsible risks in such an atmosphere? It felt as though creativity and individual judgment were being sacrificed for the sake of rigid conformity. I could not shake the feeling that we were being molded into mere executors of the tried and tested, rather than being encouraged to think independently. This realization was unsettling for me. I had entered the field with aspirations of making a meaningful impact, of being part of something innovative. The culture I encountered seemed at odds with these aspirations.

Yet contracting professionals are inherently responsible for risk taking on behalf of the government. The very task of spending the government's money is risky—but it is also fundamental to how the government works. If we can't spend money to buy goods and services to continue the functioning of government, the government

ceases to exist. Rather than steeping in the culture of fear of breaking rules, of going to jail, of failing, this culture must be replaced with a culture that embraces trying and learning, forward movement, acting with speed, of trying new things, of being able to accept more and more risk through practicing responsible risk taking measures. Imagine if we no longer lived in a culture where we were always about to do something wrong, about to make a mistake, about to do something illegal. Imagine instead that contracting officers were encouraged to be creative, to try new methods and ways of acquisition, of active collaboration, of transparency. Encouraged to be innovators. How much more effective, more efficient, less painful, might those processes be?

In the following chapters, you'll find information on how agile acquisitions work and the importance you play in driving agile acquisition, on the challenges of crafting agile acquisition approaches, industry perspectives on agile approaches and becoming a leader in driving the needed culture change in government acquisitions.

First, we'll tackle the building blocks of traditional federal acquisition to fully explore how we can best use the boundaries of these methods, and the Federal Acquisition Rules, to become more creative, flexible and agile in our federal acquisitions.

The Federal Acquisition Regulations (FAR)

The landscape of government contracting is not only intricate and regulated but also constantly evolving, making the understanding of its fundamental rules more essential, especially for those seeking to implement change. In this section, we delve into these core regulations and ideas, shedding light on the key aspects that govern the public procurement processes. This understanding is vital for various stakeholders, from government officials and policy makers to contractors and consultants, as it forms the bedrock upon which effective, fair, and transparent contracting practices are built. Knowing these rules and regulations is necessary for compliance but equally it is about being equipped to adapt to and influence changes within this complex system. As the government seeks to modernize procurement processes, incorporate new technologies, and adapt to evolving needs, a deep understanding of these foundations becomes essential for driving effective and sustainable change. This chapter aims to provide that knowledge, setting the stage for informed decision-making and strategic innovation in government contracting and then explores how to use this framework to begin driving agile acquisition approaches.

History and Span of the FAR

The Federal Acquisition Regulations, commonly known as FAR, serve as the primary set of rules governing the acquisition process by which the U.S. federal government purchases goods and services. Its roots can be traced back to the Armed Services Procurement Regulation (ASPR) and the Federal Procurement Regulation (FPR) of the 1960s. The FAR, itself was created in 1984 and continues to evolve. The system was established to consolidate the numerous individual agency procurement regulations into one comprehensive set of standards and guidelines.

The FAR's central purpose is to ensure that all federal acquisitions are conducted in a manner that is consistent, efficient, and fair. Its primary objectives include ensuring that the government obtains the best possible value for its purchases, promoting competition in the acquisition process, and upholding integrity and openness. The FAR also aims to foster a simplified and uniform acquisition process across all federal agencies. This ensures the protection of taxpayers' interests and promotes the efficient and effective use of federal resources. By adhering to these principles, the FAR helps guide government agencies in achieving prudent and responsible procurement decisions.

The FAR is organized into 53 parts, each targeting a distinct facet of the federal acquisition process. These regulations are methodically broken down into Parts, Sections, and Subsections to facilitate navigation. The FAR structure includes eight subchapters, with each one focusing on a major area of federal procurement. These range from general procurement policies to specialized procurement instruments: Acquisition Planning, Contract Types, Solicitation

Process, Evaluation of Offers and Award, Post-Award Administration, Ethics and Compliance, and Small Business Programs. We explore the most relevant Parts throughout this chapter.

For example, Part 15 concentrates on contracting by negotiation. Each part comprises various sections and subsections that delve into finer details of specific topics. For instance, in Part 15, subsections are devoted to critical areas like "Source Selection" and "Negotiation and Award." Understanding the organization and structure of the FAR is required for anyone involved in federal contracting to properly navigate the complexities of the federal acquisition process.

FAR Parts Overview
The FAR's structure is designed for ease of reference. Each of the 53 parts caters to a specific aspect or stage of the acquisition process. Some parts are procedural, guiding how to conduct procurements, while others establish guidelines for specific types of acquisitions. Together, they create a framework that ensures consistency, fairness, and transparency in federal procurements. The following section will provide an explanation of the different parts and their relevance.

Contracting Officers
The CO plays a pivotal role in the federal acquisition process as defined by the FAR. As the government's primary representative in procurements, the CO ensures that contracts are in line with the FAR and other relevant regulations. The CO's authority to legally bind the government in contracts is established under FAR Part 1.602-1 - Authority. This role extends to leading source selection and negotiations as detailed in FAR Part 15 - Contracting by Negotiation. They are responsible for overseeing the entire lifecycle

of a contract, including contract performance and compliance. Additionally, they have a significant role in financial oversight as touched upon in various sections, including FAR Part 15.4 - Contract Pricing. FAR Part 19 - Small Business Programs underscores the CO's responsibility to consider small businesses in federal procurement.

The CO's job involves interaction with a range of professionals. They work closely with program managers in defining the government's requirements. The complexities of contract law necessitate collaboration with legal professionals, a relationship covered across various parts of the FAR. FAR Part 32, Contract Financing outlines the financial elements of contracting, highlighting the interaction with finance professionals.

Technical expertise is often required in procurement, leading COs to engage with technical specialists across the organization. The CO is a key figure effectively bridging the gap between regulatory requirements and the government's operational needs. They collaborate with a variety of professionals, including program managers, legal and finance experts, technical specialists, and small business advocates, to ensure that the government's procurement activities are conducted efficiently, transparently, and with integrity. This is one of the unique aspects that make being a CO such an incredible career, they are the glue across the organization.

Acquisition Planning
Acquisition planning in the federal government is a detailed and strategic process, thoroughly outlined in the FAR. This process is critical in ensuring that government procurements are conducted effectively, economically, and in a timely manner, as emphasized

in FAR Part 7, Acquisition Planning. A key aspect of acquisition planning involves defining clear objectives, an essential step in determining the government's needs. The planning process also involves evaluating potential sources, an activity underscored in FAR Part 10, Market Research, which highlights the importance of identifying capable suppliers. Market research is vital in this process, aiding in the identification of capabilities, price determination, understanding market trends, enhancing competition, and risk assessment. While direct risk assessment is not explicitly under market research, it forms a crucial part of overall acquisition planning and is discussed in various parts of the FAR.

This includes determining the appropriate contract type and size for each procurement, guided by the instructions in FAR Part 16, Types of Contracts. Additionally, FAR Part 19, Small Business Programs offers requirements for considering socio-economic goals, such as setting aside contracts for small businesses.

Post-award contract management, covered under FAR Part 42, Contract Administration and Audit Services, ensures effective oversight after contract award. Overall, the FAR's comprehensive guidance on acquisition planning aligns with these essential elements, highlighting the importance of meticulous planning in government procurement. This ensures that government acquisition activities are aligned with the best interests of the nation and taxpayers, underlining the significance of having a thorough and strategic approach to government procurement.

Contract Types
The FAR offers detailed guidance on various contract types suitable for different procurement scenarios, considering the nature of

the work and the associated risks. Fixed-price contracts, outlined in FAR Part 16.2, involve contractors agreeing to a set price for deliverables, regardless of their actual costs. This contract type offers budget certainty and incentivizes cost control but can lead to disputes if requirements are not well-defined.

Cost-reimbursement contracts, as described in FAR Part 16.3, involve the government covering the contractor's allowable costs up to a predetermined limit. These contracts are beneficial for complex projects with uncertain costs but require rigorous oversight to ensure cost control.

Time-and-Materials (T&M) contracts, covered under FAR Part 16.6, compensate contractors for both time and materials used. While this type offers flexibility for projects with hard-to-estimate costs, it also necessitates close monitoring to ensure proper billing.

In selecting the appropriate contract type, fixed-price contracts are favored when the project specifics are clear, ensuring mutual understanding of deliverables. Cost-reimbursement contracts are chosen for projects with performance uncertainties that make accurate cost estimation difficult. Time and Materials contracts are suitable when it's challenging to accurately estimate the work scope or duration at the contract's outset. The FAR provides a thorough framework for contract type selection, enabling COs to choose the most fitting type for each procurement situation.

Solicitation Process
The FAR outlines detailed guidelines and procedures for the solicitation process in federal acquisitions. The preparation of solicitations involves clearly defining the requirement as per FAR Part

11, Assembling a Comprehensive Solicitation Package, which is further covered under FAR Parts 14 and 15, and determining the contract type under FAR Part 16.

The methods of solicitation include RFPs, as described in FAR Part 15, which offer flexibility for negotiations and technical solutions. Invitations for Bids (IFBs), detailed in FAR Part 14, focus on price, awarding the lowest qualified bidder. Requests for Quotations (RFQs) are generally used under simplified procedures, as per FAR Part 13.1, Requests for Information (RFIs), while not uniquely detailed in the FAR, are supported by the FAR Part 10 emphasis on market research.

Publicizing these solicitations, which is crucial for reaching the acquisition community and potential contractors, is governed by FAR Part 5. This part also covers synopsizing, which provides brief descriptions of upcoming procurements, and establishes guidelines for response times, ensuring that potential contractors have sufficient time to respond to government solicitations.

Adhering to these procedures as regulated by the FAR is key to maintaining the integrity of the federal acquisition system, ensuring that the government and taxpayers receive the best possible outcomes from procurement activities.

Evaluation of Offers and Award
The evaluation of offers and contract award phase in the FAR outlines a systematic approach to ensure transparency and impartiality. The most comprehensive process is outlined under FAR Part 15. This can be used as a basis for simplifying the process for acquisitions under other FAR parts. The process begins with an initial review

of proposals to align them with solicitation requirements, as per FAR Part 15.206. This is followed by a detailed technical evaluation, cost/price assessment, and past performance review, all highlighted in FAR 15.305, to thoroughly assess each proposal's viability and effectiveness. Source selection criteria are clearly defined and prioritized in FAR Part 15.304, providing benchmarks against which proposals are judged. The relative importance of different criteria is established, setting clear priorities for the evaluation. This guides how proposals are evaluated against the criteria.

Once the initial assessments are complete, the competitive range determination occurs, selecting the top proposals for further consideration, as described in FAR Part 15.306(c). This leads to discussions and negotiations with potential contractors, refining proposals to meet the government's needs. The final decision, or the best value determination, is based on which proposal offers the most advantage for the government, as per FAR Part 15.308. After this decision, the contract award is finalized with the selected contractor. Unsuccessful bidders are offered debriefings to provide insights into the selection process, as detailed in FAR Part 15.506.

These FAR parts ensure that the U.S. government's contract award process is thorough. They are also the context synonymous with the lengthy painful procurement process we endeavor to change, which will be addressed later in this book.

Post-Award Administration
The administration of federal contracts after awarding is meticulously outlined in the FAR, covering various aspects of contract management. Contract modifications and change orders are a significant part of post-award administration. Modifications, as

detailed in FAR Part 43, may be needed for various reasons and can be unilateral or bilateral. Change orders, under the Changes clause in federal contracts, provide the contracting officer the authority to direct changes, which are elaborated in FAR Part 43.201 and various FAR Part 52.243 clauses depending on the contract type. The more rigid the contract structure, the more important this section becomes. Agile Contracting looks to minimize the contractual changes required.

Disputes and claims are other key elements in contract administration. Disputes, as per FAR Part 33.2, can arise from disagreements between contracting parties, with resolution methods ranging from mutual agreement to legal avenues as outlined in FAR Part 33.204 and FAR Part 33.210. Claims, defined in FAR Part 33.206, are formal assertions from a contractor seeking payment or adjustment under contract terms.

Additionally, contract closeout procedures are used for finalizing contracts. This includes confirming contract completion, ensuring all payments are made as per contract terms, and handling proper documentation and disposition of government property, as per FAR Part 4.8, FAR Part 32.9, and FAR Part 45. The official closeout process, governed by FAR Part 42.7 and FAR Part 42.708, ensures all terms have been met and the contract is finalized.

Proper administration in the post-award phase is crucial for the government to receive the intended goods and services and for contractors to receive fair compensation. The FAR provides comprehensive guidelines to ensure effective management and closure of contracts.

If this all seems like a lot, well, it is. But stick with me, there are a few more critical sections to cover. If reading through this is a bit painful, imagine trying to be innovative while enforcing it all. That is what this book is about, you can't start innovating until you understand the context of what you are innovating.

Ethics and Compliance

Federal acquisitions place a strong emphasis on ethics and compliance, particularly in FAR Part 3, which deals with "Improper Business Practices and Personal Conflicts of Interest." The importance of ethical conduct in federal acquisitions is paramount for several reasons. Trust and transparency are essential to keep the acquisition process free from fraud, waste, and abuse, as highlighted in FAR Part 3.1 – Safeguards against Improper Business Practices. A level playing field, as ensured by ethical practices, guarantees healthy competition and optimal outcomes for the government. Ethical behavior also promotes the efficient use of taxpayer money by reducing the risks of overpayments or fraudulent activities.

Conflicts of interest are a significant aspect of ethics in federal acquisitions. Personal conflicts involve situations where government employees might have interests that could improperly influence their actions, while organizational conflicts occur when a contractor's activities might compromise its ability to deliver unbiased services. Both are addressed in FAR Part 3.1 and FAR Part 9.5, emphasizing the importance of detecting, disclosing, and managing potential conflicts.

Reporting and addressing unethical conduct is another critical component. Whistleblower protections are in place to safeguard those who report waste, fraud, abuse, or unethical behavior, as

per FAR Part 3.9. There are designated reporting mechanisms for individuals to report unethical actions, and it is vital to ensure that any claims are investigated and, if proven, appropriate corrective measures are undertaken. This might include disciplinary actions, contract termination, or legal actions, as detailed in FAR Part 3.7 – Contractor Code of Business Ethics and Conduct.

Small Business Programs

The FAR sets forth the rules and guidelines for government acquisitions, with specific attention to small businesses in FAR Part 19. It encompasses several socioeconomic contracting programs aimed at supporting various small business categories. The 8(a) Business Development Program, under FAR Part 19.8, aids small, disadvantaged businesses in competing in the federal marketplace. The Women-Owned Small Business (WOSB) Program, detailed in FAR Part 19.15, ensures a portion of federal contracts are awarded to women-owned businesses. The Service-Disabled Veteran-Owned Small Business (SDVOSB) Program, as per FAR Part 19.14, assists businesses owned by service-disabled veterans in accessing federal contracts. Additionally, the Historically Underutilized Business Zones (HUBZone) Program under FAR Part 19.13 supports small businesses in economically distressed areas.

The FAR also addresses set-asides, subcontracting, and mentor-protégé programs. Set-asides, discussed in FAR Part 19.5, are contracts reserved for small businesses or specific categories of small businesses. Subcontracting, as per FAR Part 19.7, involves large prime contractors having requirements to award a percentage of subcontracted work to small businesses. Mentor-Protégé Programs encourage larger companies to provide developmental

support to small businesses, fostering growth and enhancing the capabilities of the protégé firms.

Reporting and compliance are also key aspects of small business contracting under the FAR. Contractors are required to report annually on their small business subcontracting efforts, using the System for Award Management (SAM) and the Electronic Subcontracting Reporting System (ESRS), as stated in FAR Part 19.7. Compliance audits are conducted periodically to ensure contractors meet their small business goals or are making a sincere effort to do so. Penalties are imposed on contractors not meeting their small business subcontracting commitments or misrepresenting their status, as outlined in FAR Part 19.6. These FAR parts provide essential guidance for COs, small businesses, and prime contractors, helping them navigate the federal acquisition process and take full advantage of the opportunities provided by Small Business Programs.

Updates and Amendments to FAR
Updates and amendments to the FAR are critical for professionals in the field to track and understand. All proposed and final changes to the FAR are published in the Federal Register, making it an essential resource for staying informed about updates. Another useful tool is the FARSite (Federal Acquisition Regulation Site). FARSite provides a consolidated view of the FAR and its supplements and includes the most recent updates. Additionally, each federal agency may have its own FAR supplements, so monitoring agency-specific websites is crucial to ensure awareness of any agency-specific regulations. Keeping abreast of these resources is required for professionals who need to stay current with the continuous evolution of procurement regulations and practices

and is critical for the change agent to understand the most current tools available to them.

The ever-evolving nature of federal acquisition demands a commitment to ongoing education and adaptation. Professionals in this field must leverage a wide array of available resources to stay informed and proficient. This includes not only online tools such as the Federal Register and agency-specific websites but also engaging with professional associations and networks that provide insights into the latest trends and best practices in federal procurement. By embracing these resources, acquisition professionals can confidently navigate the complex landscape of federal procurement, ensuring they are well-equipped to handle the challenges and changes that come with managing government contracts. Such dedication to continuous learning is essential for maintaining the highest standards of federal acquisition processes.

How Can the FAR Be Used to Drive Agile Acquisition?

The discussion about the FAR accommodating agile methodologies often leads to the question: where exactly in the FAR are these provisions made? Drawing a parallel from my experience in martial arts, the foundational lessons often turn out to be the most crucial. A similar perspective can apply to understanding the FAR. In martial arts, the initial moves in a kata (the forms in Karate), the first technique you learn, or the primary principle you are taught, these elements are often what you return to for the most effective strategies. This concept applies to the FAR as well.

When seeking agile in the FAR, it's easy to miss the significance

of the very beginning. FAR Part 1 lays down the basic principles and policies that guide the entire acquisition process. It may not explicitly mention "agile", but it establishes the groundwork for flexible and innovative approaches to procurement. FAR Part 1 sets the tone for the entire set of regulations, emphasizing the importance of using sound judgment, encouraging efficiency, and advocating for the use of best practices in acquisitions.

This part of the FAR, often overlooked, is crucial in understanding how the regulations support agile methodologies. It provides the legal and procedural framework within which more specific agile-friendly policies and practices can be implemented. Just as in martial arts, where mastery often involves revisiting and refining the basics, a deep understanding of FAR Part 1 is required to effectively apply agile principles within the bounds of federal procurement law. Because of its significance, I provide some exact excerpts from FAR Part 1, highlighting the specific words that support agile:

> 1.102(c) **The Acquisition Team consists of all participants** in government acquisition including not only representatives of the technical, supply, and procurement communities but also the customers they serve, **and the contractors who provide the products and services**.

> 1.102(d) The role of each member of the Acquisition Team is to exercise personal initiative and sound business judgment in providing the best value product or service to meet the customers" needs**. In exercising initiative, government members of the Acquisition Team may assume if a specific strategy, practice, policy or procedure is in the best interests**

of the government and is not addressed in the FAR, nor prohibited by law (statute or case law), Executive order or other regulation, that the strategy, practice, policy or procedure is a permissible exercise of authority.

1.102-1 Discussion.

(a) Introduction. The statement of Guiding Principles for the federal Acquisition System (System) represents a concise statement designed to be user-friendly for all participants in government acquisition. The following discussion of the principles is provided in order to illuminate the meaning of the terms and phrases used. The framework for the System includes the Guiding Principles for the System and the supporting policies and procedures in the FAR.

(b) Vision. All participants in the System are responsible for making acquisition decisions that deliver the best value product or service to the customer. Best value must be viewed from a broad perspective and is achieved by balancing the many competing interests in the System. **The result is a system which works better and costs less.**

1.102-2 Performance standards.

(a) Satisfy the customer in terms of cost, quality, and timeliness of the delivered product or service.

(1) **The principal customers for the product or**

service provided by the System are the users and line managers, acting on behalf of the American taxpayer.

(2) **The System must be responsive and adaptive to customer needs**, concerns, and feedback. Implementation of acquisition policies and procedures, as well as consideration of timeliness, quality, and cost throughout the process, **must take into account the perspective of the user of the product or service**.

(3) When selecting contractors to provide products or perform services, the government will use contractors who have a track record of successful past performance or who demonstrate a current superior ability to perform.

(4) **The government must not hesitate to communicate with the commercial sector as early as possible in the acquisition cycle** to help the government determine the capabilities available in the commercial marketplace. The government will maximize its use of commercial products and services in meeting government requirements.

(5) It is the policy of the System to promote competition in the acquisition process.

(6) The System must perform in a timely, high quality, and cost-effective manner.

(7) All members of the Team are required to employ planning as an integral part of the overall process of acquiring products or services. Although advance planning is required, **each member of the Team must be flexible in order to accommodate changing or unforeseen mission needs**. Planning is a tool for the accomplishment of tasks, and application of its discipline should be commensurate with the size and nature of a given task.

(b) Minimize administrative operating costs.

(1) In order to ensure that maximum efficiency is obtained, **rules, regulations, and policies should be promulgated only when their benefits clearly exceed the costs of their development, implementation, administration, and enforcement**. This applies to internal administrative processes, including reviews, and to rules and procedures applied to the contractor community.

2) The System must provide uniformity where it contributes to efficiency or where fairness or predictability is essential. The System should also, however, encourage innovation, and local adaptation where uniformity is not essential.

(c) Conduct business with integrity, fairness, and openness.

(1) An essential consideration in every aspect of

the System is maintaining the public's trust. Not only must the System have integrity, but the actions of each member of the Team must reflect integrity, fairness, and openness. The foundation of integrity within the System is a competent, experienced, and well-trained, professional workforce. Accordingly, each member of the Team is responsible and accountable for the wise use of public resources as well as acting in a manner which maintains the public's trust. Fairness and openness require open communication among team members, internal and external customers, and the public.

(2) **To achieve efficient operations, the System must shift its focus from "risk avoidance" to one of "risk management."** The cost to the taxpayer of attempting to eliminate all risk is prohibitive. **The Executive Branch will accept and manage the risk associated with empowering local procurement officials to take independent action based on their professional judgment**.

(3) The government shall exercise discretion, use sound business judgment, and comply with applicable laws and regulations in dealing with contractors and prospective contractors. **All contractors and prospective contractors shall be treated fairly and impartially but need not be treated the same.**

As we delve deeper into the FAR and its alignment with agile development practices, we will explore the key parts of the FAR

that are essential for enabling the acquisition of agile development services. While these sections build upon the foundational principles established in FAR Part 1.102, they offer more specific guidance and frameworks that can be directly applied to agile procurement. This exploration is crucial for understanding how the FAR, as a holistic regulatory document, accommodates and supports the flexibility, responsiveness, and iterative nature of agile methodologies within the context of federal procurement. By examining these specific parts of the FAR, we gain a clearer view of how federal agencies can effectively navigate and leverage these regulations to implement agile software development projects, ensuring they align with federal laws and policies while also reaping the benefits of agile approaches.

> **FAR Part 5 - Competition:** Competition in contracting is fundamental to ensuring the government gets the best value. In iterative development, this competition can drive the identification of vendors who are well-suited to agile methodologies, bringing innovative approaches to the table.

> **FAR Part 6 - Synopsis and Exceptions:** FAR Part 6 outlines several exceptions where competition in federal procurement is not required. These exceptions are important for allowing agencies flexibility to award directly to a specific vendor under certain conditions.

> **FAR Part 8.4 - Federal Supply Schedule (FSS):** The FSS provides access to commercially available products and services, which can be useful for iterative development projects. It allows for quicker acquisition of commercial software tools and services that can be incrementally adopted.

FAR Part 9.5 - Conflicts of Interest: Identifying and avoiding conflicts of interest is key to maintaining the integrity of the procurement process. In iterative development, it's important to ensure that the selected vendors can operate impartially. This becomes even more critical as technical requirements evolve.

FAR Part 10 - Market Research: Market research is required for understanding the latest trends and capabilities in the industry, including those related to agile methodologies. It informs the government of the most suitable and innovative approaches for their requirements.

FAR Part 12 - Commercial Acquisitions: This part encourages the acquisition of commercial items (including services) to meet government needs. Furthermore, it establishes policies more aligned with the commercial marketplace making it more accessible to non-traditional companies.

FAR Part 13.5 - Simplified Acquisitions for Commercial Items: This section simplifies the procurement process for commercial items, which is conducive to the agile philosophy of rapid and iterative development cycles and further reduces the burden on industry lowering the barrier of entry to non-traditional vendors.

FAR Part 16 - Contract Types: This section outlines the different contract types that can support various aspects of iterative development (i.e., Fixed Price and Time-and-Materials (T&M).

FAR Part 16.5 - Indefinite-Delivery Contracts (ID/IQ):
ID/IQ contracts play a significant role in facilitating scalable iterative development contracts. This part of the FAR is crucial for understanding how federal agencies can structure contracts to support the flexibility and adaptability inherent in agile development. Indefinite-Delivery Contracts under FAR Part 16.5 include Indefinite-Delivery Indefinite-Quantity (IDIQ), Task Order, and Delivery Order contracts. These contract types are well-suited for iterative development for several reasons:

Flexibility and Scalability: IDIQ contracts, for example, allow for a range of services to be delivered over a period of time without specifying the exact quantities at the time of contract award. This flexibility is key in agile development, where project scopes and requirements can evolve.

Task and Delivery Orders: With Task and Delivery Order contracts, agencies can issue orders for specific tasks as needs arise. This approach aligns well with the iterative nature of agile development, where work is completed in small, manageable segments or sprints.

Facilitating Long-Term Relationships: These contract types enable agencies to establish long-term relationships with vendors without committing to the full scope of work upfront. This is helpful for agile projects, which may benefit from sustained collaboration between the agency and the vendor.

Budget Management: FAR Part 16.5 allows for varying contract pricing arrangements, which can be tailored to suit

the needs of iterative development. Whether fixed-price or time-and-materials, these contracts can accommodate the budgeting nuances of agile projects.

Adapting to Changing Requirements: The structure of IDIQ and similar contracts under FAR Part 16.5 provides a framework for accommodating changing requirements, a common occurrence in agile development. Agencies can change task orders or issue new orders as project needs evolve.

FAR Part 16.5 offers a valuable framework for structuring contracts that support the unique demands of iterative development. Its provisions for flexibility, scalability, and adaptability make it an ideal choice for contracts that aim to implement agile software development methodologies.

FAR Part 19 - Set Asides: Set-asides for small businesses or other designated groups can help to reach niche companies that specialize in agile methodologies, introducing innovative approaches to government projects.

FAR Part 35 - Research and Development (R&D) - Broad Agency Announcements (BAAs): BAAs under FAR 35 allow the government to solicit general requirements for research and development proposals, which can include innovative approaches to software development and iterative methodologies.

FAR Part 37.6 - Performance-Based Acquisitions: This encourages outcomes-based contracting, which aligns well

with agile's focus on delivering functional products and services.

FAR Part 39 - Acquisitions of Information Technology (IT): This part addresses the unique aspects of IT procurement, including software development, where agile methodologies are often employed.

FAR Part 39.103 - Modular Contracting: Specifically addresses the concept of iterative development in IT projects by encouraging the use of smaller, more manageable modules rather than large, monolithic contracts.

Understanding and using these parts of the FAR can assist government agencies in implementing and managing iterative development projects effectively, ensuring they align with federal regulations while benefiting from the agility and innovation these methodologies offer.

How To Work with a Contracting Officer on Agile Acquisitions

"I learned long ago never to wrestle with a pig. You get dirty, and besides, the pig likes it." George Bernard Shaw's witty remark captures the challenges of engaging in contentious debates, especially in federal acquisitions. Understanding the current state of affairs, as dictated by the FAR, is crucial in charting a course for where you need to go. However, debating FAR clauses with a CO can be a delicate endeavor. It's important to approach such discussions with caution and respect. While you may possess the ability and knowledge to interpret the FAR, remember that COs hold statutory

authority. Your perspective, no matter how well-informed, remains an opinion in this context. The FAR's language is versatile and can be manipulated to serve various ends, but it should be engaged judiciously.

The key objective is to get both parties on the same side, and that starts with respect. A proficient CO should function as a business advisor to their customer, using the flexibility within the FAR to forge optimized solutions. However, contracting courses emphasize personal and professional liability excessively, instilling a heightened sense of risk aversion in COs. While their duty to protect the taxpayer is paramount, it's essential to recognize that ethical conduct and taxpayer protection can manifest in multiple forms. Overemphasis on risk avoidance can stifle progress and innovation. Focusing on efficiency and effective risk mitigation can lead to more dynamic, beneficial outcomes. This chapter will provide the foundation for implementing agile in government contracts. It is intended to be a roadmap to facilitate discussions between COs and requirement owners. It should be considered a starting point, not policy.

If you find yourself in a situation where a CO appears overly cautious or unwilling to leverage the FAR's available advantages, I recommend appealing to their sense of professionalism and expertise. Encourage them to consider how they might apply the FAR's provisions in a manner that aligns with both the letter and the spirit of the regulations. This approach fosters a collaborative, respectful dialogue, steering clear of contentious "mud-wrestling" scenarios.

Engaging with the FAR and COs requires a balanced approach: one that respects authority and expertise, promotes constructive

dialogue, and seeks to explore the full potential of the regulatory framework without descending into unproductive confrontations. By doing so, you can navigate the complexities of federal acquisitions more effectively, advocating for innovative, efficient solutions that serve the best interests of all stakeholders involved.

Using FAR to Create Agile Acquisitions: Strategies and Methods

Now that we have established a foundation of the FAR regulations that govern contracting, it is time to delve into the application. This chapter offers insights into various strategies and methods for navigating this complex field. Starting with "Best Value" procurement, we explore how to balance cost, quality, and efficiency to optimize outcomes. We then discuss the importance of allowing creativity and innovation evaluations in "Apples to Apples Comparison."

The segment on "Hiring Contractors" provides strategies for selecting the right partners, while OTA and "Unsolicited Proposals" reveal innovative and flexible procurement pathways. We also highlight the role of small businesses in government innovation through Small Business Innovative Research (SBIR) and discuss using incentives to align contractor efforts with government objectives in "Using Incentives."

"Buying the Cloud" focuses on strategies for procuring cloud services, reflecting the digital transformation in government IT needs. The chapter concludes with a discussion of available tools to assist your journey into agile acquisition.

<u>The Importance of Articulating Priorities</u>

Agencies would benefit from maintaining conviction in their stated priorities during the procurement process. If the agency has determined that certain aspects of quality, innovation, or technical capability are more important than cost, this should be clearly reflected in their evaluation and selection process. Consistency and clarity in these priorities can help ease some challenges associated with the best value tradeoff.

Best intentions aside, the rigid approach to acquisitions often resembles a "bring me a rock" scenario, where industry bidders are left to guess what the agency wants and how much it will pay. A more transparent and effective approach would be for agencies to specify their budget or investment limits upfront and evaluate proposals based on the quality of the technical return on this investment. This method would provide clearer guidance to bidders and facilitate a more straightforward evaluation process focused on how well each proposal maximizes value within the specified budget.

By openly communicating what they will invest, agencies can set clear expectations. This approach allows vendors to tailor their solutions within a known budget constraint, focusing their efforts on maximizing technical and operational value. It also reduces the guesswork involved in proposal development, enabling more accurate and innovative solutions that align with the agency's objectives and budgetary constraints.

While the concept of best value tradeoff is sound, its implementation in government procurement often faces challenges because

of subjectivity, fear of protests, and lack of clear communication regarding budget and value priorities. An RFP should provide the basis of award, criteria, and priority; a shift towards more transparent communication of budget constraints and evaluation based on the quality of technical solutions within those constraints could lead to more effective and satisfactory procurement outcomes for both agencies and contractors. This approach emphasizes value optimization rather than cost minimization, aligning more closely with the true intent of best value tradeoff in government acquisitions.

Best Value

Acquisitions under FAR Part 15 are guided by the principle of achieving the "best value" for the government. This principle is central to the decision-making process in federal procurements, shaping the approach to selecting contractors. The concept of best value encompasses a range of source selection strategies, including Lowest Price Technically Acceptable (LPTA) and Tradeoff, each tailored to specific types of acquisitions and constraints.

Lowest Cost Technically Acceptable, FAR Part 15.101.2

The FAR acknowledges that the relative importance of cost or price in the acquisition process can vary significantly depending on the procurement. In certain types of acquisitions, especially those where the requirements are well-defined and the risk of unsuccessful contract performance is low, cost or price may become the dominant factor in source selection. This is where the LPTA approach, FAR Part 15.101-2 is often applied. Under LPTA, the focus is on meeting the technical requirements at the lowest possible cost. It is an effective strategy for straightforward, well-defined requirements

where quality exceeds a set threshold, but beyond that, additional capability or higher quality does not provide additional value. The LPTA approach implies that while there should be rigid technical qualifications in place, the agency is not inclined to pay more for capabilities that exceed the set requirements. This approach is suitable for procurements where an increase in technical capability or performance above the minimum requirement does not justify the additional expense.

I can honestly say, I have only used LPTA one time to acquire agile development services, and I do not recommend it. In this instance however, I had an incredibly short timeline, 48 hours, to execute the contract. I also had an incredibly talented PO and Program Manager who deeply understood agile principles. This award was issued under an existing ID/IQ, so the typical constraints of publications were not required. We drafted a high-level SOO, leveraged the existing labor categories on the contract, and issued a Request for Quote (RFQ). We managed to make the award in 24 hours. This was a heroic effort on all parts. The result, however, was okay at best. The project worked but was hamstrung by low labor rates significantly limiting the ability to obtain and keep top talent on the contract to develop the service.

Tradeoff, FAR Part 15.101-1

The Tradeoff approach is typically preferred in scenarios where the procurement is more complex or where the government stands to benefit from solutions that exceed the basic technical requirements. Under the Tradeoff process, a more nuanced evaluation is conducted where factors such as quality, technical capability, and past performance are weighed against cost or price. This approach

is relevant in acquisitions where the requirement is less definitive, involves significant development work, or where there is a higher performance risk.

In Tradeoff procurements, decision-makers assess the extent to which a proposal's technical excellence or superior past performance justifies its higher cost. This method provides agencies with the flexibility to make awards to offers that have higher technical ratings and prices, considering that the additional expenditure is justified by the superior value these offers provide. In government procurement, the term "best value tradeoff" is used when agencies are seeking more than just the lowest cost in their acquisitions. However, the practical application of this concept can be challenging and sometimes misaligned with the intended outcome.

The core principle of the best value tradeoff approach is that a higher cost can be justified if it is offset by a higher technical rating or greater value. However, this principle often falters. Determining how much extra cost is justified by a certain level of increased quality or technical merit is highly subjective. Agencies often struggle with this evaluation, out of fear of protest, leading to decisions that may not always align with the original intent of prioritizing value over cost. Agencies may find it difficult to substantiate why a more expensive proposal offers better value, leading to a cautious approach that favors lower-cost bids. This risk aversion can cause a compromise on quality or innovation.

Over-Reliance on FAR Part 15, Contracting By Negotiation

Frequent use of FAR Part 15 and procedures resembling it has

unintended consequences. According to the GAO, when an agency opts to use FAR Part 15 methods in acquisitions categorized under other parts, like FAR Part 16.5, Indefinite Delivery Contracts. it should be committed to adhering to those standards. This over-reliance on FAR Part 15 procedures can lead to complex and cumbersome procurement processes, especially when simpler methods could be more effective.

Considering this, **agencies should avoid processes similar to FAR Part 15** when using other parts such as FAR Part 12, Acquisition of Commercial Products; FAR Part 13, Simplified Acquisition Procedures; and FAR Part 16.5 to streamline the acquisition process. FAR Part 12.102 is relevant for the procurement of supplies or services that are classified as commercial items under FAR Part 2.101. This part simplifies the process, making it more accessible and manageable, especially for commercial vendors.

When I first started acquiring agile development services under FAR Part 12, I received considerable pushback. While this is a complex discussion that merits its own separate analysis, it has been settled by the Office of Federal Procurement Policy (OFPP), that agile development services are indeed commercial. This interpretation significantly broadens acquisitions under FAR Part 12, easing the process for acquiring these services.

FAR Part 13, Simplified Acquisition Procedures, outlines policies and procedures for acquiring supplies and services, including Research and Development (R&D). This part is noteworthy because of FAR Part 13.5, which grants special authority for the acquisition of commercial items that exceed the simplified acquisition

threshold but do not exceed $7.5 million or $15 million when in support of a contingency operation;

- To facilitate the defense against or recovery from cyber, nuclear, biological, chemical, or radiological attack;

- To support a request from the Secretary of State or the Administrator of the United States Agency for International Development to facilitate provision of international disaster assistance; or

- To support response to an emergency or major disaster, or when the acquisition will be treated as an acquisition of commercial products or commercial services in accordance with FAR Part 12.102(f).

This threshold covers a substantial range of R&D activities, offering an opportunity to meaningfully simplify the procurement process for modular agile development services.

FAR Parts 12 and 13 offers advantages beyond just simplifying procedures. It makes a host of clauses and provisions inapplicable, thereby becoming more approachable for non-traditional vendors. This aspect is critical in encouraging innovation and participation from a wider range of suppliers, including those who may not typically engage in government contracting due to its perceived complexity.

FAR Part 13.103, Use of Standard Price Quotation, further simplifies the process by endorsing the use of standing price quotations. This provision allows individuals to avoid getting quotations for each

purchase, provided that the pricing information is current and the government benefits from maximum discounts before awarding the contract. This can expedite the procurement process, reduce administrative burdens, and ensure that the government receives the best possible value.

While FAR Part 15 and its akin procedures have their place, over-reliance on them can lead to inefficiencies and complexities that hamper the procurement process. Exploring and using FAR Parts 12 and 13, especially for commercial items and services, can offer a more streamlined, efficient, and vendor-friendly approach. This not only benefits the government by simplifying acquisitions and attracting a broader range of vendors but also supports the development and procurement of innovative solutions.

Apples to Apples Comparison

In contracting, the phrase "apples to apples comparison" often highlights the desire for proposals to align to a specific set of requirements such that each proposal can be evaluated in the same way. This approach, while clear and structured, is not the most effective approach when innovative or unique solutions are required. A broader perspective in the evaluation process allows for considering a range of diverse solutions. This can incentivize innovation, as it enables vendors to present varied solutions that may not strictly adhere to pre-defined specifications. By assessing different solutions, requirement owners can discover unique or superior approaches that might be missed in a more rigid comparison setup.

A shift in method is encouraged, allowing requirement owners

to focus more on outlining their overall vision and objectives for a project, instead of providing detailed requirements. This strategy allows vendors to propose solutions that are in line with the program objectives without being limited to a narrow set of criteria. Such an approach encourages various innovative solutions, enabling vendors to use their unique strengths and capabilities. This way of framing the requirement broadens potential solutions and promotes a more creative and diverse response from vendors.

The concept of value in contracting goes beyond just seeking the lowest cost to fulfill a requirement. True value is about obtaining the most efficient and high-quality result for the investment made. It involves a careful balance of cost, quality, and functionality, and emphasizes the importance of innovation and strategic thinking. This perspective in contracting ensures that value is not solely measured in monetary terms but also in terms of overall project effectiveness and likelihood of success.

Moving away from the traditional "apples to apples comparison" to something more like "apples to bananas to pineapples" in contracting can lead to more nuanced procurement outcomes. Requirement offices, by focusing on their broader vision, objectives, and the investment they will make, can invite a range of solutions. This approach helps in assessing the unique capabilities of different vendors in meeting project requirements, fostering creativity, and leading to more comprehensive solutions.

Hiring Contractors

The current approach to hiring contractors in government procurements often relies heavily on the evaluation of technical proposals

and bids. This process, while structured and standardized, falls short in assessing the deeper capabilities and suitability of a contractor for a specific project. Drawing a parallel with the hiring process for quality employees, there's potential for a more effective approach to selecting contractors.

Evaluating Fundamentals Through Past Experience

 Just as resumes provide an initial overview of a candidate's qualifications and experience, a contractor's past experience can serve as a baseline for their capabilities. Past Experience differs from "Past Performance" which has a specific definition and criteria governed by FAR Part 42.15. Past Experience should be treated as a technical criterion. This step involves assessing a vendor's track record on previous projects, including code repositories, screen shots, and demos, which can offer insights into their reliability, quality of work, and ability to meet deadlines. However, similar to employee recruitment, this should only be the first step in the evaluation process.

Engaging in Detailed Discussions

The core of this approach lies in having detailed, interactive discussions with potential contractors, akin to a job interview. These discussions would go beyond the surface level of written proposals and delve into the contractor's technical and emotional qualifications. Scripted questions can provide a structured starting point, but follow-up questions should be dynamic and based on the responses given, allowing evaluators to probe deeper into the contractor's understanding and approach to potential project challenges. Assessing a contractor's technical qualifications is

essential, but understanding their emotional qualifications, such as their culture and approach to problem solving, adaptability, and ability to work under pressure is equally important. These skills are important in projects that require high collaboration, innovation, or flexibility.

Work Product Assessments

Similar to how engineers are asked to perform a coding test, or writers are asked to create content, evaluators should consider code challenges, free trials, and usability tests as options to better understand a vendor's capability. There is an element of misunderstanding in this area but all three are allowable. Code challenges, where the vendors develop code under a scripted scenario are allowed as part of the evaluation process. Similarly, usability tests can be performed as part of the evaluation without concern of violating the Anti Deficiency Act. Despite common belief, vendors can also give the government free access to existing software. This can be done through either a gratuitous service agreement (which does require a contracting action) or through a free trial so long as that is a normal business practice available to the general public.

Technical Depth of Evaluators

Just as hiring managers for employees need to have sufficient technical knowledge to assess candidates effectively, the evaluators selecting contractors need to possess the technical expertise relevant to the project. This depth enables them to ask the right questions and accurately interpret the responses, leading to a more informed and reliable selection process.

Balancing Structured and Flexible Evaluations

It is important to balance flexibility with the need for structure and fairness in government procurement. The process should be transparent and consistent, providing equal opportunity for all potential contractors to show their capabilities.

Adopting a contracting approach similar to that used for quality employees can enhance the vendor selection process in government procurement. This method emphasizes a deeper evaluation of contractors' capabilities, going beyond written proposals to interactive discussions as well as code challenges, free trials, and usability tests that assess both technical and emotional qualifications. While it requires a balance with the procedural requirements of government contracting, this approach can lead to more informed decisions and potentially more successful project outcomes.

Other Transactions Authority (OTA)

OTA represents a significant shift in the landscape of federal procurement. Despite what some may think, OTA is not a new authority. In July 1958, President Eisenhower established NASA. Along with the creation of the new agency, this act also introduced a new category of agreements, to support the innovative work that would fall under their purview, known as OTs. However, OTA did not make headlines in the world of software development until the 2016 NDAA established USC 2371(b) (now 4231), where OTA was notably expanded. This expansion included provisions for prototyping and direct awards for follow-on production contracts, which have opened new avenues for innovation and development within Department of Defense (DoD) procurement. Notably, if

these prototypes are competed under the original OTA award, they can be sole-sourced for continued development, even under FAR-based contracts.

This flexibility inherent in OTA, particularly for prototyping software development, allows for the exploration of advanced methodologies like iterative development. Since OTAs are not FAR based, there were very few rules that governed how they had to be conducted. This "blue-sky" opportunity made way for these methodologies to enable a departure from traditional approaches and facilitate the development of more sophisticated, user-focused software acquisitions.

One of the pivotal aspects of OTA is its encouragement of participation from "non-traditional vendors." For the DoD, this term encompasses a wide range of entities, including small businesses or large businesses that are not currently performing and have not performed, for at least the one-year period preceding the solicitation, any contract or subcontract for the DoD subject to the full coverage under the cost accounting standards. In simple terms it means the entity has not had any DoD contracts for more than $50 million in the last year. This broad definition aims to diversify the pool of potential vendors and inject fresh perspectives and innovative solutions into DoD projects.

Even though OTA primarily targets non-traditional vendors, large traditional defense contractors are not excluded from OTA opportunities. They can still receive OTA awards, albeit usually under a cost-sharing model. Traditional vendors may also collaborate with a non-traditional vendor who performs a significant portion of the work, in which case the cost-sharing requirement is waived. This

provision encourages collaborations that blend the experience and stability of traditional contractors with the agility and innovation of non-traditional vendors.

The DoD has established several consortiums to streamline access to OTA. These consortiums provide assisted acquisition support and serve as platforms where companies can collaborate, share expertise, and access OTA opportunities more easily. Since OTA exists outside of the FAR and the various contract types and acquisition approaches exist inside the FAR, Commercial Solutions Openings (CSO) were also created in 2016 as a potential acquisition approach which outline a process akin to BAAs, as found under FAR Part 35.016. CSOs allow for a more open solicitation of innovative solutions and can lead to direct award contracts, further simplifying the procurement process.

OTA provides a flexible and dynamic procurement pathway that diverges from traditional FAR-based contracting. It is conducive to rapid prototyping, research and innovative solution development, offering an attractive option for both new entrants and established players in the defense sector. By leveraging OTA, the DoD can access innovative technologies and solutions, fostering a more agile and responsive defense procurement ecosystem. The Defense Innovation Unit (DIU) has demonstrated tremendous success with a specific OTA, the CSO, and touts a 40% transition rate from prototype to production. There are currently 11 agencies with OT authority: NASA, DoD, Health and Human Services and its component agencies, Department of Homeland Security and its component agencies, Energy, Transportation, Domestic Nuclear Detection Office, and the Federal Aviation Administration. Unfortunately, DoD is the only agency that makes extensive use

of OTAs. Congress and OMB should be encouraged to expand the use to all agencies, citing the success at DoD.

FAR Part 15.6, Unsolicited Proposals

Unsolicited proposals are authorized under FAR Part 15.6 and represent a significant opportunity for innovation and problem-solving. However, I challenge you to find a company that has received one. The current state of processes surrounding these proposals often falls short of being a "front door" for companies to work with the government. Most federal agencies have established procedures for unsolicited proposals, but their implementation is questionable. This opaqueness can deter innovation and discourage private sector entities from offering novel solutions to government problems.

Agencies often struggle with these proposals because they do not fit into the standard procurement process, which is designed around specific requirements and solicited bids. This struggle is often summed up in the sentiment, "sorry, we just don't know how to buy a thing we didn't ask for." This mindset can cause many innovative solutions to be overlooked or disregarded, resulting in missed opportunities for government agencies to benefit from innovative ideas and technologies.

The process for handling unsolicited proposals should balance protecting competition and rewarding innovation. While it is essential to maintain a fair and competitive procurement environment, the government also needs to be receptive to novel solutions that target specific government needs. This balance is needed to foster an environment where innovative ideas are welcomed and given due consideration.

The process for accepting and evaluating unsolicited proposals should be straightforward, budgeted, and efficient. Clear guidelines, criteria for evaluation, and a dedicated budget for exploring these proposals can make the process more approachable for companies wishing to submit unsolicited proposals.

While FAR Part 6.302-1, Only One Responsible Source, allows for sole sourcing when there is only one responsible source, this does not neatly apply to unsolicited solutions. Unsolicited proposals present unique approaches that have not been openly competed or compared against other options. Therefore, a different approach is needed to evaluate and potentially buy these innovative solutions.

Such proposals are a potential goldmine of innovation and problem-solving capabilities that, if harnessed correctly, can significantly benefit government operations. Creating a more welcoming and efficient process for these proposals would invite private sector participation in government problem-solving.

Open BAAs, SBIRs, STTRs, and BPAs can serve as an effective workaround as they allow for the submission of proposals to a general agency request. This openness can encourage companies to present ideas and solutions that the agency might not have considered. The DoD has been experimenting with different approaches such as Tradewinds and the Open SBIR topics to address these issues.

SBIRs and STTR

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are key parts of the U.S.

government's efforts to stimulate technological innovation and foster entrepreneurship.

Small Business Innovation Research (SBIR)

This program encourages domestic small businesses to engage in federal research and development that has the potential for commercialization. It aims to enable small businesses to explore their technological potential and provides the incentive to profit from its commercialization. The program is structured in three phases:

- Phase I: Feasibility Study. The goal is to establish the technical merit, feasibility, and commercial potential of the proposed R&D efforts and to determine the quality of performance of the small business awardee prior to providing further federal support in Phase II.

- Phase II: Focuses on the development, demonstration, and delivery of the innovation. Only Phase I awardees are eligible for Phase II funding, unless the agency issues a Direct to Phase II, as seen done by the US Air Force.

- Phase III: Commercialization phase, where the small business pursues commercialization objectives resulting from the Phase I/II R&D activities. The SBIR program does not fund Phase III. **However, a Phase III can be awarded after a Phase I or Phase II has been awarded and carries with it a statutory preference for direct award (or sole source) which can be awarded at any time, for any amount.**

Small Business Technology Transfer (STTR)

This program expands funding opportunities in the federal innovation research and development arena. Central to the program is an expansion of the public/private sector partnership to include joint venture opportunities for small businesses and nonprofit research institutions. The unique feature of the STTR program is the requirement for the small business to formally collaborate with a research institution in Phase I and Phase II. STTR's structure is similar to that of the SBIR program in terms of phases but focuses on enabling the transfer of technology developed by a research institution through the entrepreneurship of a small business.

Both SBIR and STTR programs are highly competitive and encourage small businesses to explore their technological potential and provide the incentive to profit from commercialization of innovative technologies. Yet the SBIR/STTR programs, while well intentioned and genuinely a great starting point for new entrants, create a sort of paradoxical problem. While they do provide access to funding, they do not address the "valley death" and often leave companies stuck with a new idea and limited funds with no place to go. While they provide a statutory preference for direct awards, many CO's do not understand how to execute Phase III. Even without the educational barrier, vendors still need to find actual customers with funding. Outside of the lengthy budgetary process this is incredibly difficult to accomplish. So, for companies to endure without VC backing, they are forced to continue chasing additional SBIR/STTR opportunities to maintain cash flow. This is a painful and often unsustainable business model. Agencies need to be appropriated transition funds along with these programs to carry companies through to future budget cycles.

The US Air Force and its innovation unit AFWERX have experimented with programs such as Strategic Funding Increase (STRATFI) and Tactical Funding Increase (TACFI), to attempt to address this problem by solving the "valley of death." These programs pool congressional SBIR funds into larger awards in an attempt to bridge the gap between Phase II and Phase III. Even then, only a small number of SBIR/STTR awardees will receive those funds. The value of additional funding for program offices makes these programs alluring, but not scalable. For industry the varied approach across agencies, services, divisions etc.… can be overwhelming given the target market is new entrants. **These processes should be streamlined and consistent mirroring the BAA processes outlined in FAR Part 35, Research and Development Funding**.

Using Incentives To Drive Performance

Aligning incentives between the government, companies, and additional partners is as important as it is difficult. Incentives play a crucial role in shaping behavior. However, they are prone to drive unintended consequences. When incentives are generic or skewed towards one aspect of performance, they inadvertently drive behaviors that compromise other equally important areas.

If the desired outcome is high performance over time, characterized by a balance of quantity, quality, and cost, then the incentives structured within the contract should align with these goals. Aligning incentives with the provider's self-interest is key to maintaining this balance. For instance, if a contract overly emphasizes quantity (like the amount of code written or the number of physical units produced), without equally valuing quality and cost, the

provider may focus excessively on output at the expense of quality or cost-effectiveness. Similarly, if cost is the primary driver, it may lead to cutting corners in quality or quantity.

Therefore, the challenge is to design incentives that promote a holistic approach to performance. The focus should be on creating an environment where delivering on all three aspects: quantity, quality, and cost is not only encouraged but is also in the best interest of the vendor. This requires an understanding of what motivates the vendor and how those motivations can be aligned with the company's goals. Companies are typically motivated by three things; mission, diversification, and return on investment (ROI).

One effective answer lies in the opportunity for continued engagement. This can be provided either through a formal award term incentive or simply through option periods. Providing the prospect of ongoing work or future contracts can be a powerful motivator for vendors to maintain a high standard across all performance metrics. This approach incentivizes vendors to not just meet the immediate requirements but to excel in them, ensuring future opportunities. It creates a scenario where sustaining high performance in quantity, quality, and cost is the best strategy for long-term success. Thus avoiding the scenario where the contract is initially staffed with top performers, but as the PoP comes closer to ending the company begins staffing with lower quality performers or as I like to refer to it as the: "A Team, B Team, C Team" scenario.

To further encourage high-performance, the government must provide clear communication, reasonable expectations, and the provision of necessary resources and support. When vendors feel

they are operating in a supportive environment that values their contributions and fosters their success, they are more likely to be motivated to deliver high-quality work consistently.

Structuring incentives in procurement and resulting contracts requires a thoughtful approach that aligns with the desired outcomes. By focusing on incentives that encourage a balanced approach to quantity, quality, and cost, and by creating an environment conducive to success, agencies can drive behaviors that lead to optimal outcomes. This strategy not only ensures the achievement of immediate project goals but also fosters a sustainable, productive relationship between the agency and its vendors.

An Example: Buying the Cloud

Changing technology means there is also a need to change buying practices. The clearest example of this is seen in obtaining cloud hosting. Infrastructure as a Service capabilities should be treated as utilities, unfortunately, FAR Part 41.102, within Acquisition of Utility Services, explicitly covers what is a utility, and only those things (electricity, water, cable etc.) can be acquired in that manner.

The following model can be used until such time that the law changes. The first step is to establish fixed pricing for the minimum consistent needs of the agency. This involves assessing or estimating the agency's regular usage patterns to define a base level of services that will always be in use. By having a fixed price for these essential services, the agency can budget effectively and ensure that its core cloud hosting needs are met without fluctuating costs.

In addition to the core services, agencies often deal with fluctuating

demands, including peak usage times. For this variable demand, it is practical to establish a material rate structure. This means the agency pays for additional resources based on actual usage, allowing for scalability and flexibility. Setting pre-negotiated rates for these services can help the agency maintain control over costs during periods of increased usage.

There will also likely be instances where the agency's demand exceeds both the fixed and estimated variable needs. For such situations, the contract should include provisions for premium on-demand services. These services are typically more expensive but provide the resources during unexpected high-demand periods, offering the agency crucial scalability.

Finally, for data that is infrequently accessed but needs to be stored for long periods, a low-cost, long-term storage solution is advisable. This service should ideally be fixed price because of its predictable nature, with the option to incur additional costs for faster access if required. This approach is economical for storing large volumes of data that do not require regular access.

To implement this approach to cloud procurement, agencies have several pathways: Agencies can choose to amend their existing infrastructure contracts to include cloud services. This method can be used if the current contract allows for such modifications and the existing service provider can fulfill the cloud service requirements adequately.

Another avenue is to establish a new contract specifically for cloud services either from a provider or through a reseller. Resellers typically have relationships with various cloud service providers,

offering a range of solutions that can be tailored to the agency's specific needs. Most of the current cloud providers are now working directly with agencies and provide support services, removing the need (and cost) for a reseller.

A comprehensive strategy is to establish a multiple award contract with major cloud service providers. This option allows the agency to access an array of services from leading providers, promoting competitive pricing and a broad selection of services suitable for the agency's diverse requirements.

Effective procurement of cloud services for government agencies involves a multi-tiered approach that accommodates different levels of service usage, from fixed baseline needs to variable and peak demand, as well as long-term storage solutions. The selection of the procurement method, whether modifying existing contracts, working through resellers, or establishing multiple awards with key providers, should be based on the agency's unique needs and operational context. This structured model ensures that the agency's cloud services are both cost-effective and flexible enough to adapt to changing requirements.

Another Example: Buying SaaS

Purchasing Commercial Off the Shelf (COTS) products is usually straightforward, except when it comes to buying Software as a Service (SaaS). This new wave of software delivery is commonplace in our everyday lives but is complicated by the federal procurement processes. This complexity is compounded when you consider early stage SaaS products. Many companies struggle with pricing

for the government. Is it a seat license, available to a region, an office and who is paying for development?

For established SaaS products, the government will typically accept commercial prices, End User License Agreement (EULA), and Service Level Agreements (SLA). There are a few exceptions around anti-deficiency that industry has generally accommodated. For early stage products however, the government buyers tend to get hung-up around data rights. The government often feels they are paying for the continued development. I recommend industry sells discounted access to early adopters for the **implementation, configuration, and deployment** of the early version of their SaaS product. The development of new features should be funded by Internal Research & Development (IR&D) funds to keep the lines of ownership clean. This is a win-win model. The early adopters will have priority over the roadmap features but are not obligated to fund the development. The vendors should be mindful of what version is being acquired so as the product advances the prices can accommodate. Agile means there will be iterative improvements, but a beta product and a fully functional product should reasonably be priced differently. It is important to include clear demarcations between version 1 vs version 2.

As SaaS adoption becomes more commonplace, it is in everyone's best interest to establish clear boundaries and pricing models that both incentivize industry and delivers value to the government. The model of owning software rights in this case is outdated and counterintuitive. Allowing the free market to invest saves tax-payer dollars and offers a scalable solution to both sides. While I was at the start-up Rebellion Defense, we faced this challenge repeatedly and several possible deals fell through because of this

lack of understanding. Sitting down with the procurement team and explaining the model was essential to obtaining buy-in; but words have meaning. It was incumbent upon us to clearly state what the government was buying, and more importantly, what they were not.

Agile Acquisitions: Approaches and Tools

Applying the third principle of innovation, **responsible risk-taking**, to the adoption of agile acquisitions is a delicate balancing act. It's about threading the needle between the established procedures of traditional procurement and the dynamic, flexible nature of agile methodologies. In this context, responsible risk-taking means carefully navigating through the complexities of procurement rules and regulations while implementing agile practices. This approach involves a thoughtful process of evaluating where and how the principles of agility can be interwoven into the fabric of traditional acquisitions.

The key lies in understanding which aspects of procurement can be made more flexible and responsive without compromising the integrity and legality of the process. It's a journey of finding those sweet spots where incremental changes can yield significant improvements in mission delivery, all while maintaining a firm grasp on the guiding rules and principles that govern acquisitions.

Embracing this approach in agile acquisitions leads to more efficient procurement processes while also fostering a culture of continuous improvement and adaptability, crucial in an ever-evolving landscape. This is where responsible risk-taking truly shines, guiding the transformation of acquisition processes in a way that is both

innovative and grounded in a deep understanding of the framework within which they operate.

Building on the foundational knowledge of culture change, leadership, and the intricacies of the FAR, coupled with a clear understanding of agile acquisitions, you stand on the cusp of practical application. However, grasping the theory and fundamentals is just one piece of the puzzle. The real challenge lies in the execution, where these concepts are put into action.

The next chapter is designed to guide you through the nuances of executing acquisitions that are not only compliant with the FAR but also embody the principles of agility and efficiency. In this chapter, you will learn how to apply agile methodologies within the constraints of government contracting, how to navigate the complexities of procurement while fostering innovation, and how to lead teams towards successful outcomes.

As you move forward, remember that execution is an art that balances regulatory compliance with the flexibility required for innovative solutions. The upcoming chapter aims to equip you with the techniques, approaches, and mindset necessary to transform the theoretical knowledge you have acquired into effective, real-world acquisition strategies. This is where theory meets practice, where plans are transformed into action, and where you, as an acquisition professional, can truly make a difference in the landscape of government contracting.

A Tale of Two Travels

The following story (or stories) describe a hypothetical application

of both waterfall and agile development/contracting methodologies to a westward journey in an imaginary world where transportation options do not already exist. The scenario may be a fantasy, but the problems faced are all too real.

Imagine you need to travel across the country without existing transportation options. You decide to contract a vendor for this journey. Using a waterfall approach, you spend months detailing requirements, selecting a vehicle that travels at 65 MPH, and planning to reach California in 12 months. You choose a Comfort Automatic Rover (CAR) and award a Cost Plus Fixed Fee contract. The vendor begins work, planning 10 months for development and testing, aiming to finish a week ahead of schedule. Early reports are positive, showing progress on schedule and budget.

However, budget cuts limit you to $300 in fuel, requiring the CAR to achieve 30 MPG, not the original 22 MPG. The vendor can adjust, but it adds 20 days to the schedule. Production continues smoothly for three months, but approval to use the proposed methane fuel is delayed. Suddenly, a regulation change mandates biofuel from corn, requiring another engine redesign. Additionally, a new route through mountains demands further adjustments, pushing the schedule into the red.

You negotiate an Engineering Change Proposal (ECP) for a surge team to meet the deadline. The schedule improves slightly, but testing reveals the CAR achieves only 27 MPG and has a 50% ignition failure rate. Fixing this will take four weeks and more funds, which you lack. You choose to reallocate money from another project, accept the delay, and notify stakeholders.

After three more months, you receive the CAR, over budget and late. Just as you start your journey, you learn the end user has moved to Utah, halving the required distance and making gas mileage less critical. They now want a new 4X4 capability.

In contrast, using an agile approach, you start with the objective "Go West." You spend two weeks identifying key requirements and creating a flexible backlog and roadmap. You select a vendor based on their agile process, key team members, management plan, past performance, and fixed price per iteration.

Sprint 0 begins with the vendor providing a map and compass, and you start your journey. The vendor gathers feedback: you're tired, moving slowly (15 miles/day), and uncomfortable. Iteration 1 results in a Human-On Ride System Experience (HORSE), doubling your speed and increasing your travel to 60 miles/day. You are pleased with the improvement. However, you find the HORSE uncomfortable and difficult to steer.

The vendor responds by building a comfortable seat and harness in the next iteration. After 1.5 months, you're a quarter of the way across the country. Sprint 3 designs a wagon, which you review and and approve with the addition of a cover. Sprints 4, 5, and 6 deliver a Covered Wagon, pulled by multiple HORSEs, increasing comfort and efficiency.

A sudden requirement change means you need to stop in Utah for two days, which the vendor prioritizes without additional costs or schedule impacts. Regular engagement reveals that in fact your final destination has changed to Utah, saving time and money.

Eventually, the HORSE is replaced with an SUV with a biofuel engine and 4X4 capability. The agile approach delivers small, frequent updates that address current needs, saving time and resources compared to the waterfall method. The fixed price ensures predictability, and additional time and funds are invested in desired functionality, keeping the solution current with technology.

Agile Acquisitions vs Waterfall Acquisition

The traditional acquisition model, often termed "waterfall," is closely aligned with conventional development approaches. It assumes a pre-defined outcome with set technical requirements and a fixed completion timeline. This model is designed for stable comparison between different offers and indexes toward perceived risk mitigation. However, it falls short in the context of modern technology acquisitions. The rapid pace of technological innovation outstrips the lengthy timelines of traditional acquisition processes, making it nearly impossible to accurately forecast future technology needs at the outset of a project. Predicting requirements beyond a six-month horizon is increasingly challenging, necessitating a more adaptable and flexible approach. I often liken this challenge to driving a car at night in the desert. You can see clearly what is right in front of you, but the further you look in the distance the less clear things become.

Acquiring modern technology requires you to distinctly **separate contractual and technical requirements**. This separation allows for effective scope management while enabling technical deliverables to be defined and prioritized based on ongoing user engagement. The focus of evaluations then shifts to a more efficient approach through tangible demonstrations of capabilities and

unique solutions, fostering a more diverse comparison of offers. Acquisition models should align the proposal effort with the likelihood of success for vendors, increasing the depth of effort as they progress through a well-defined selection process. The **amount of effort from offerors and evaluators should be commensurate with each offerors likelihood of success.**

The concept of agile contracts is acknowledged in FAR Part 39.103, Modular Contracting. This section of the FAR advises using short performance periods and multiple options to encourage excellence in performance and provide alternatives for declining value. By integrating user centered design, agile methodologies, product ownership, DevOps, and the construction of loosely coupled parts, it's feasible to divide a large, risky contract into several smaller ones. **Each contract should be small enough that an agency can comfortably discontinue work with an underperforming vendor and replace them with a new one.** The remaining vendors continue their work, minimizing overall project disruption. New vendors should easily take over from their predecessors, given the expectation of regular, comprehensive, and tested software deliveries. This agile approach to contracting is crucial for accommodating the rapid evolution of technology and meeting modern project demands efficiently.

Agile as a Service

You may be asking yourself, "how can I buy something that isn't defined?" The answer is that you are buying a repeatable process for the delivery of a product. Think of the acquisition as a factory, in that you are buying the processes the factory will use to produce usable high quality code. The process should explain how the code

will be developed and how you will know when it is done. These are the things you are buying. The specifics, what goes into it and what comes out are worked out in the process itself, these are your technical requirements.

Rather than focusing on how to buy a solution, the emphasis should be on acquiring the development services to deliver products to end users. The concept of "Agile as a Service," akin to Platform as a Service (PaaS) or other Anything as a Service (XaaS) models, offers a more adaptable and scalable approach. This strategy shifts the focus from procuring specific teams or hours to securing a service capable of responding flexibly to the agency's needs. Contracts under this model should provide core levels of service with the ability to scale additional services as required. This could involve a fixed price Contract Line Item Number (CLIN) for the foundational level of services, which would cover the development environment and known capacity requirements like a dedicated development team, in addition to any necessary corporate oversight.

To complement the fixed-price CLIN for base services, the contract may include provisions for priced, predictable capacity under a Level of Effort (LOE) or fixed price arrangement for pre-priced iterations. This allows for adaptability in response to varying project needs. A premium-priced tier of support for unexpected, high-priority requirements may also be included, covering urgent tasks outside the regular development schedule.

This contract structure is beneficial for companies of all sizes, enabling them to maintain a dedicated workforce for base requirements while having a flexible workforce to address changing needs. Pre-negotiated agreements with internal or external partners

for premium-priced efforts ensure preparedness for unforeseen demands. By adopting an "Agile as a Service" model and structuring contracts for flexibility and scalability, government agencies can more effectively meet their evolving development needs, ensuring delivery of functional products to end-users.

Buying a Repeatable Process

I often reflect on how I inadvertently began acquiring agile development services before I even fully grasped what agile was. As a CO, my role has always been more than just managing contracts; it was about being a business advisor. So, when my clients started transitioning from traditional waterfall methodologies to those requiring more dynamic technical functionality, I knew my approach to contracting had to evolve in tandem. This evolution did not happen overnight. My journey to developing effective acquisition strategies for agile programs involved a gradual but deliberate shift in understanding and approach. Key to this was recognizing the importance of flexibility in contractual terms to accommodate the evolving needs of the projects.

One principle that resonated deeply with me is the focus on "Understanding What People Need," as emphasized in the Digital Service Playbook.[1] This playbook, available free online from the US Digital Services, underscores the importance of starting digital projects by identifying and addressing the real needs of users. It highlights that the design and technical decisions should be driven by the needs of the people, not confined by government structures or silos. This user-centric approach is the bedrock of the agile philosophy,

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1. US Digital Services: The Digital Services Playbook. 2014. https://playbook. cio.gov/.

which is all about continuously testing and adapting to ensure the product remains relevant and valuable.

The primary purpose of agile development is to ensure that you deliver those features that are of most value to the users first. Every backlog of requirements should be organized into "must haves, should haves, and could haves". The only way to know how to rack and stack the requirements is to understand the users, their needs, and how they will interact with the product. User Centered Design (UCD) starts before the acquisition and continues throughout the delivery. The idea of "Lean," which originated in the Toyota manufacturing process in the mid-20th century, is to eliminate waste. This is done through prioritization and just-in-time development and manufacturing.

UCD provides the strategy to incorporate users into the development process. Customer Experience (UX) refers to the specific experience users have using it. The terms are coupled together to convey the importance of developing and executing the approach for user engagement to obtain user feedback early and often such that it helps drive prioritization. This ensures that what is being developed meets or exceeds their expectations. This is the true value of agile, even if a program were to stop due to funding constraints or changes in priorities, what has been built to date should represent those features that matter most to the users. It is important to identify an empowered UX/UCD lead to guide the process and to incorporate regular user feedback, in each iteration if possible, and to incorporate UX/UDC requirements into the contract.

To develop a new model for acquiring agile development services, I leveraged this principle. I engaged in extensive research and

conducted interviews with my customers to better understand their specific needs. Before attempting to develop a new model I also engaged in deep discussions with all the vendors currently supporting my contracts. It was equally important to understand how these changes might impact their business.

Initially, I gravitated towards labor hour and Time & Materials (T&M) contracts to provide maximum flexibility for program managers. While this approach was effective, it also posed considerable risk to the government. What became clear was that the requirement was not just for hours of labor; it was for a repeatable process for functional code. There was a defined process (the agile methodology) and a tangible deliverable (the developed software).

This led me to conclude, at the time, that a fixed price per iteration model was the most suitable contracting vehicle for these types of projects. It was a conclusion I could not have reached without dedicating time to truly understand the unique needs of my clients. By doing so, I could align my contracting approach with the agile methodologies and deliver real value to the programs I supported. As I will discuss later, my preference remains fixed price, but my philosophy has since changed. **The best contract is the one you can implement at your agency using the principles found in this book.**

Operation and Sustainment is Agile

After my tour within the NGA R&D division concluded and with a short stint in foreign accommodation, I was tasked with overseeing the Agency's Infrastructure contract, which encompassed the help desk and operation and maintenance costs (O&M) for

programs no longer in development. This contract was an all-en-compassing IT vehicle, or an "omnibus" contract as we termed it. My experience with this contract, which predated the adoption of agile methodologies in government, proved to be incredibly instructive and laid a strong foundation for my future roles.

When I first took charge of this contract, it was known as the "sweat-shop of contracting" because of the sheer volume of modifications it required — hundreds in a year, often driven by small engineering requirements and the influx of end-of-year sweep money. This contract was over a decade old and bore the marks of its lengthy service. The contracting office was lined with bookshelves filled with binders documenting the contract's extensive history. The contract had undergone so many modifications that it had been reissued three times because it had exhausted all available contract Accounting Classification Reference Numbers (ACRN). To put this into perspective, an ACRN is a two-position alphanumeric code that links accounting data to detailed line item information. This system can cycle through various combinations, indicating the sheer volume of modifications we dealt with.

It was clear from the start that changes were necessary. While I had limited influence over the incremental funding from differ-ent corners of the agency, I saw an opportunity to streamline the numerous engineering changes. With over a decade of histori-cal data, I could estimate the annual volume and average cost of these changes. Instead of detailing each technical requirement, I established a new engineering CLIN with categories of work and a funded estimated ceiling, which we executed through technical direction. This approach significantly reduced the number of yearly modifications and laid the groundwork for a key aspect of agile

contracting discussed earlier: decoupling technical requirements from contractual ones.

However, there is a second profound connection between O&M and agile contracting, that I would not recognize until years later: capacity management. O&M contracts, much like agile contracts, are centered on managing a fixed number of resources with set capacities. The funding allocated covers this capacity, and the work, often manifesting as trouble tickets, is prioritized similarly to tasks in an agile backlog. This prioritization drives the work-flow, with the value assessed through a Service Level Agreement (SLA), akin to a Quality Assurance Surveillance Plan (QASP) in agile contracting.

This revelation that I later discovered illustrated that agile methodologies are not a completely new idea, but a similar approach applied to a new concept. When faced with skepticism about implementing agile in an agency, **one effective strategy is to suggest modeling a development contract after an O&M contract**, leveraging the principles of capacity management and prioritized work allocation. This approach can show the viability and effectiveness of agile methods in an understood government contracting context.

Executing an Agile Acquisition

Agile acquisitions begin in a similar fashion as traditional acquisitions in that they initiate with identifying a need, conducting market research, and performing an analysis of alternatives. However, the divergence between the two approaches becomes evident as the acquisition strategy is developed. Agile acquisitions focus on developing objective-level requirements and prioritize tangible

products over extensive documentation in deliverables. This approach emphasizes "show" rather than "tell," often incorporating criteria for past experience in the technical evaluation, alongside the standard past performance assessment. Past experience is distinguished from past performance in that it emphasizes the nature of the products developed and the methodologies employed in their creation, as opposed to solely focusing on contractual compliance and execution.

Upon selecting the most suitable acquisition vehicle and evaluation criteria, agile acquisitions typically employ a multi-phased or down-select approach. This method efficiently narrows the field of potential vendors, enabling early notification for those less likely to succeed, thereby conserving their resources for other opportunities. This phase also minimizes the risk and potential impact of protests.

Subsequent phases often involve interactive elements, such as technical exchanges or demonstrations. This direct engagement between evaluators and vendors fosters a deeper understanding of the proposed solutions and the teams behind them, transcending the limitations of traditional, rigid procurement communication barriers. It's crucial that the agency's technical evaluation capabilities align with this approach; if there's a lack of technical expertise to assess code, emphasis should be placed on evaluating the usability and conducting comprehensive oral discussions.

The next stage requires negotiations with the chosen vendor to finalize implementation plans, performance work statements, and quality assurance plans. This collaborative process ensures clarity and mutual understanding of intentions and expectations,

significantly reducing the likelihood of project failures due to miscommunications or misinterpretations. This approach, grounded in collaboration and flexibility, marks a significant departure from traditional acquisitions and is instrumental in fostering successful solutions.

The final stage in agile acquisitions is the longest and yet most overlooked. That is the execution phase. The acquisition itself may end at award, but the management of the agile contract continues through closeout and the principles outlined above remain in place throughout. **The acquisition is for the delivery not the contract**, this is important to remember, as a contracting professional, you are tied to the mission and tied to the contractual outcomes. As such COs should attend at least some of the agile ceremonies, at the very least the demos, to see what they are buying and learn of any performance issues.

Converting to Agile

Converting an existing contract to agile or drafting a new agile contract is not as challenging as it might seem. The primary objective in making this shift is to streamline the contracting process to support product delivery more effectively. The essence of agile contracting is to ensure that contractual frameworks facilitate, rather than hinder, the PO and vendor's ability to deliver the product. For existing large contracts, I do not recommend converting the entire contract to agile at once. Both the government and the vendor have a lot to learn and prove. Instead, I typically add a single innovation CLIN, where I begin implementing agile practices for new development. This has proven successful at several agencies.

However, the success of an agile contract goes beyond its structure and terms. A crucial element is having the right personnel driving the project. It is not just about following agile methodologies; it is about having someone who deeply understands the vision and process of agile development. This team needs to be well-versed in implementing a user-centric design approach to ensure that the end product not only functions but also genuinely meets the needs of the users.

It's important to acknowledge that agile methods, while efficient, do not automatically guarantee a successful outcome. It is entirely possible to deliver a subpar product using agile techniques if the vision and user focus are not properly aligned. To mitigate this risk, the project needs leaders who can effectively translate agile principles into practical actions. They should have a strong grasp of the product vision and be skilled in translating user feedback into functional improvements. The right blend of skills is critical: someone who can navigate the intricacies of agile development while keeping the user's needs at the forefront. This involves continual testing, feedback, and adaptation to ensure that the final product is not just a result of an agile process but is also a solution that effectively solves user problems and enhances their experience.

Transitioning to an agile contract is a step in the right direction, but it is the human element—the team or individual leading the delivery—that ultimately determines the success of the project. Their understanding of agile principles, coupled with a user-centric approach, is essential in delivering a product that is not only developed through agile methods but also truly resonates with and fulfills the needs of its users.

I wrote my MBA thesis on FAR Part 37.6, Performance-Based Acquisitions (PBA) in 2006 before I had ever heard of Agile. It was not until 2010 when I took over Application Service Acquisitions for NGA, and Director Letitia Long declared NGA would become a Scaled Agile Frameworks (SAFe) organization did I recognize the relationship between the two.

At the time, I was responsible for all of the software development contracts for NGA. It was a massive high stakes division. When I stepped into the role it was shrouded in the typical contracting complaints; too slow, too rigid, too difficult. The centerpiece of the division was a large multiple-award ID/IQ contract with four pools of work. Each task order was a large system development activity, typically awarded as cost-reimbursement orders. Despite the efficiencies afforded under FAR Part 16.5, Indefinite Delivery Contracts the acquisitions followed the complex FAR Part 15, Contract by Negotiation methodologies. Requirement development included SOWs that often exceeded 60 pages and were accompanied by system requirement documents that could be in the hundreds. Most of the source selections occurred off site, lasted several months, and placed a premium value on lines of code proposed. The awards were high-dollar and delivery followed the waterfall approach lasting years. With the new edict from the Director, this had to change. The problem was nobody knew how to do it, all they were certain was you could not do it under the FAR. It was my responsibility to solve this problem.

I started with what I did not know. Undertaking a deep dive into agile, I interviewed stakeholders, vendors, and subject matter experts. I did hours of research and drew from what I had learned in my previous roles and while writing my thesis.

So how is FAR Part 37.6, Performance Based Acquisition, related to agile software development? While FAR 37.6 does not specifically mention agile methodologies, it aligns with the principles and practices that underpin agile development approaches. Here's how FAR Part 37.6 can be linked to agile software development:

- <u>Outcome-Focused Approach</u>: FAR Part 37.6 emphasizes the importance of focusing on outcomes rather than prescribing specific methods or processes. Similarly, agile software development emphasizes delivering value and achieving desired outcomes through iterative development and frequent feedback loops.

- <u>Flexibility and Adaptability</u>: Agile methodologies prioritize flexibility and adaptability in responding to changing requirements and stakeholder feedback. FAR Part 37.6 encourages agencies to structure contracts that provide flexibility and allow for adjustments based on evolving needs.

- <u>Collaboration and Communication</u>: Agile development emphasizes frequent collaboration and communication among stakeholders, including government agencies and contractors. FAR Part 37.6 promotes early engagement and collaboration between the government and industry partners to ensure a shared understanding of requirements and foster effective communication throughout the procurement process.

- <u>Iterative Delivery and Continuous Improvement</u>: Agile software development promotes iterative delivery,

allowing for the early release of functional software components. FAR Part 37.6 supports the concept of progressive acquisition, where contracts are structured to enable incremental deliveries and continuous improvement.

While FAR Part 37.6 does not explicitly prescribe agile methodologies, it provides a framework that aligns with the principles of agile software development. By leveraging the flexibility, collaboration, iterative delivery, and outcome-focused approach of both FAR Part 37.6 and Agile, government agencies can foster more efficient and effective software development processes that deliver value to stakeholders.

With this foundation I began experimenting with different approaches. Before I could put them in action, I would need to get approval from our legal office. This was no small order. NGA's procurement legal team was as conservative as they were smart. The idea of running acquisitions of this size outside of the construct of FAR Part 15 and with technical requirements outside of the contractual requirements made them incredibly uncomfortable. I approached them with several concepts each time being met with a resounding no. Each time I would go back to my desk and "sharpen my pencil." As painful (and frustrating) as this process was, it forced me to think critically to examine every approach and eventually build a model, that as much as they wanted to reject, they had no legal basis to do so. I would like to say it was smooth sailing from there, but unfortunately it was not. Despite not having a legal basis for "no," they still had their opinion of "no." Additionally, security and configuration management leadership had their concerns as well. All of which culminated in more than one occasion where I had to sit across from the various Senior

Leaders and the Deputy Secretary of the Agency to plead my case. In the end, I was granted approval to implement my new approach. The thoroughly developed concept for change presented a vision that the Deputy could understand. The user research and detailed understanding of how it aligned with regulations and policy gave him the confidence in the legality of the approach, and the mitigations built into the execution leveraging those regulations gave him the assurance that risks were sufficiently mitigated. It was a victory that came at a significant cost in terms of political capital. From that point on every new idea, I had was met with incredible scrutiny. My time at NGA was coming to an end, not because there was not more work to be done, but because in the name of innovation I had built up enough scar tissue that I was no longer the best person to drive change, the baggage associated with pushing people outside of their comfort zone would eventually create new unnecessary roadblocks. I will always remember fondly my time at NGA, I still care deeply about the agency and their mission. I worked with incredible people and acquired a lifetime's worth of knowledge.

Contract Types

A common question for agencies starting agile, is what is the best contract type? This is sort of like asking which wine to pair with fish? It depends on whether you are cooking with it or drinking it alongside and even then, it is largely up to the end user. Of course, this may be more complicated with regard to contract type since the implications go far beyond your tastebuds. The answer is **the best contract type is the one your agency is most likely to accept**. Each type of contract has pros and cons and the reality is having trust between government and industry is the real secret to success.

Having experienced people on both sides that communicate and follow the appropriate ceremonies will matter more in the end than what contract was used. If that isn't a satisfactory answer, I suppose the best way to answer this question is to start with your options. FAR 16, Contract Types, provides all the contract types available and recommendations on when - and when not - to use them.

That said, it is worth diving into the two most typical contract structures to better understand how they work with agile. Cost Reimbursable (CR) contracts are not included in this list. While it is possible to deliver agile under CR contracts, they are not recommended because most non-traditional companies will not have approved systems to compete under CR, thereby eliminating the most qualified talent pool from the acquisition. Additionally, agile services are commercial and therefore should not use CR contracts per the FAR.

Time and Material (T&M)
T&M contracts are the easy way to go to get buy-in from an organization. There will be little debate about what the agency is buying or how you will approve invoices. This contract structure aligns nicely with an undefined or general scope which is typically associated with agile development. However, this contract type should not be selected lightly. In the end the agency is buying a best effort contract, and there is no guarantee of functional code at the end of each iteration. Successful execution of this contract type requires a strong PO (government) and strong Scrum Master (Contractor) to ensure the hours are being used appropriately. Additionally, costs associated with this contract type are less predictable since vendors may work (and bill) additional time to complete sprints within the time-box.

Firm Fixed Price (FFP)

FFP contracts provide a single price for an agreed outcome. While historically, these would not be used when there is uncertainty, the thought process changed in 2016 when the government began looking at agile development as the process. With this outlook the requirements are specific, it is the process that is being acquired with the result of functioning product or code aligned to a definition of done and a quality assurance surveillance plan (QASP). This contract type is the least administratively burdensome and ensures avoidance of cost overruns. Using the practice of investing vs budgeting, you will get a fixed period of development for a fixed time.

Fixed Price (FP) per Iteration

FP per Iteration is the most common approach to buying agile services. In this approach you are buying a number of time boxed iterations during a specified period. This makes sense with acquiring the repeatable process, as the invoice for payment is associated with each period delivering the process outlined in the PWS and resulting in a functional product that meets the definition of done. Where agencies run into trouble is when they focus on the user stories that were (or were not delivered), the emphasis should be on quality, not quantity. If the process was followed and functional code was received the vendor should be paid. Program management should track the trends to ensure the company overtime is delivering the value equivalent to the investment, if not it is time to take corrective action or consider a new vendor.

Fixed Price per Feature/User Story

FP per feature or user story is similar to iteration but ties closer to the actual outcomes. This is tricky to manage as the features will

not be fully developed at the onset and sizes of features and stories can vary greatly, so they are difficult to price. To accommodate this, the government can have prices associated with sizing (e.g., t-shirt sizes are a common example). I personally, do not recommend this approach as it can have the negative impact of driving overly-conservative sizing estimates to ensure success.

So Labor Hour or Firm Fixed Price?

Labor hour contracts (e.g., Time and Materials) require the contractor to deliver their best effort for a specific number of hours typically with predefined labor categories. Firm Fixed Price (FFP) can either be a fixed price for a defined deliverable or service. For the sake of this conversation, I will focus on the latter. So, which is better? The answer remains, it depends. In my experience labor hour contracts are better when you already have an existing team (government or contractor) and you are looking to augment the existing skill-sets. In this case you assume the process is already defined and you can specify the unique skill sets you need and for how long. But let us say you do not have an existing team, either you are standing up a new project or are rolling an existing waterfall program into an agile one. Here you should leverage industry's expertise and not attempt to define the process, labor categories, or hours. Instead, focus on your overarching objectives. I refer you to FAR Part 37.6 – Performance Based Acquisition. Let the vendors bid their unique solutions to meet your objectives using a performance work statement (PWS). Per FAR Part 39, Acquisition of IT, you are to use modular contracting or incremental builds for IT. In applying these concepts, under this scenario, I would recommend the use of a FFP based on a fixed price per iteration.

Allow the vendors to propose their process, their team, and their

price to deliver a repeatable process resulting in functional code. This code will be based on user stories at the start of each iteration, ensuring that each release, approximately every six to eight weeks, you are providing the end-user with usable code based on their priorities within the overarching scope/objectives.

Are Agile Development Contracts Severable?

An understanding of the concept of severability in government contracting is required for understanding how contracts, including those for agile development, are funded and how contractors are reimbursed. Severability determines at what point in a contract's performance the government has received enough value to consider the contract fulfilled.

In simple terms, a severable contract is one where services are continuing and ongoing for which benefit is received each time the service is rendered. Non-severable contracts are those where the work results in a final product or end-item and for which benefit is received only when the entire project is complete. This is often the case in traditional waterfall system development projects, where the final product's functionality is contingent upon the completion of the entire project.

For agile development contracts, whether or not they are severable can be complex and largely depends on how the contract is structured. Agile development, characterized by its iterative and incremental delivery, leans towards being severable. Each sprint or iteration in agile methodology aims to deliver a functional product. Therefore, theoretically, if the development were to stop at any iteration, the government should have a functional component that

does not require further development to be useful. There is a case to be made for considering each release in an agile development contract as a non-severable element. If the contract is fixed price per release, each release could be viewed as a distinct, complete item, nonseverable within its own time frame. In this scenario, the completion of each release is essential for delivering the agreed-upon value for that specific period.

From a broader perspective, the overall agile development contract can still be seen as severable since the completion of the entire project is not dependent on individual releases. Each release, while potentially nonseverable within itself, contributes to a larger, severable contract where the government gains value incrementally.

The severability of agile development contracts hinges on their specific structure and the details of their execution. While each release might be non-severable if viewed as a standalone completion item, the overall contract aligns more with the concept of severability because of the incremental and independent value delivered through each agile iteration.

Acquiring Agile as a Commercial Services for R&D

The application of agile commercial contracting methods, particularly in the realm of Research and Development (R&D), is an important topic. Leveraging FAR Part 37.6, Performance-Based Acquisitions (PBA), to buy a repeatable process for the delivery of a functional product (buying the agile process itself rather than the product it creates) can be seen as purchasing a commercial service. This approach is significant for the delivery of functional

software products, which aligns with the focus on the development aspect, particularly in software (SW) development.

FAR Part 35, Research and Development Contracting, does not explicitly address the use of commercial contracting methods for R&D. However, its silence on this matter or lack of express prohibition means the government is encouraged to implement innovative solutions that best meet user needs. In fact, FAR Part 35 elaborates on R&D requirements and the work specification, recognizing that specific deliverables will emerge from the executed process.

User centered design and user research are critical components, especially in software development, which falls under the "development" category as defined in FAR 35.001. This part characterizes development as the systematic use of scientific and technical knowledge in creating new or improved products or services to meet specific performance requirements. It includes design, engineering, and prototyping.

Further, FAR Part 35.005, Work Statement, advises on the creation of requirement documents for R&D contracts. These statements should foster innovation and creativity, focusing on achieving objectives or end goals rather than predetermined results. This guidance clearly aligns to agile SW development, where flexibility and innovation are paramount.

Regarding contract types for R&D, FAR Part 35.006, Contracting Methods and Types, entrusts the choice to the CO, who should consult with technical personnel. While fixed-price contracts are preferred, in R&D, this preference is contingent on whether goals,

objectives, and specifications are sufficiently defined to warrant such an arrangement. The degree to which these factors can be clearly outlined will largely dictate the contract type. The CO must select a contract type that aligns with the work required.

While FAR Part 35 doesn't explicitly mention agile or commercial contracting methods for R&D, its guidance on flexible requirements and the emphasis on innovation align well with agile principles. The discretion given to COs in choosing contract types further supports the potential application of agile methods in R&D contracting, provided that it aligns with the goals and specifications of the project at hand.

Agile Systems

The question whether systems or hardware can be bought or developed using agile methods is a topic I often encounter. To address this, it's important to distinguish between procurement and development, and to assess the suitability of agile methods in each context.

First, it is indeed possible to buy virtually anything, including systems and hardware, in an agile manner. The flexibility and adaptiveness of agile methodologies make them applicable across a wide range of procurement scenarios. However, the more critical question is whether systems or hardware should be developed using agile methodologies.

Looking at hardware development, the roots of agile in lean manufacturing methods suggest a positive answer. Just as lean methods revolutionized manufacturing by streamlining processes and

reducing waste, agile methodologies can bring similar benefits to hardware development. They foster continuous improvement, rapid iteration, and responsive design, which can be highly advantageous in developing hardware systems.

With systems, which here refers to a combination of software and hardware, applying agile methods have shown to be highly effective. The principles of agile — such as iterative development, continuous feedback, and adaptability — are as applicable to systems development as they are to software alone. Using agile methods in systems development can lead to more efficient processes, better alignment with user requirements, and ultimately, more effective, and relevant end products.

A key challenge in applying agile methods to systems or hardware development is managing dependencies. This is addressed by a well-structured roadmap. Contrary to some misconceptions, agile is not about unstructured or whimsical development; it is a disciplined approach where the PO plays a pivotal role in prioritizing features and ensuring that dependencies are appropriately managed. Even in situations where the hardware component might have more predictable aspects, the lean philosophy teaches us to avoid overcommitment to a single development path. Instead, maintaining flexibility and responsiveness is vital.

While agile methodologies originated in software development, their underlying principles originated in manufacturing and broadly apply and can be adapted to the development of systems and hardware. The key is to understand and manage dependencies effectively through strategic planning and prioritization, ensuring

that all components of the system, whether software or hardware, are developed in a cohesive and responsive manner.

Developing Tools to Support Agile Acquisition

While working at the NGA, I developed and implemented new methods for acquiring agile development services. This led me to share what I had learned with other government agencies. During this time, I was contacted by the OFPP who were working on a guide to help government agencies understand how to acquire agile development services within the existing rules of the FAR. I was asked to contribute to this guide. Working alongside another expert whose identity I initially did not know, we explored the FAR in depth. Our aim was to make it clearer how its rules could be applied to agile development projects.

The outcome of our work was the TechFAR (Technical Federal Acquisition Regulations) Handbook. This handbook was the first of its kind to address how agile development services could be aligned with the FAR. It was a practical resource, designed to guide federal agencies as they adopted more agile approaches in their procurement processes. Creating the TechFAR Handbook was an opportunity to help bridge the gap between agile development methods and existing government procurement policies. The handbook represented a step forward in modernizing how government agencies approach technology and service acquisition, and I was proud to have played a part in its creation.

The TechFAR Handbook is a specialized guide that explains how the FAR can apply to procurement in the realm of IT and digital services. It illuminates the considerable flexibility the FAR grants

to contracting officials, enabling them to execute acquisitions in innovative and efficient manners, incorporating successful strategies often seen in the commercial sector.

Central to the TechFAR Handbook is its focus on parts of the FAR that apply to digital services acquisitions. The handbook delineates how federal agencies can effectively use FAR authorities in a manner that aligns with contemporary development approaches. These approaches emphasize the improvement of investment management, budgetary feasibility, risk reduction, and accelerating the delivery of value to stakeholders.

A key aim of the TechFAR Handbook is to dispel common misconceptions that hinder the modernization of government approaches to digital service development and to advocate for effective risk management strategies. Its primary concentration is on software development within IT acquisition and excludes non-developmental items and commercially available off-the-shelf products. The handbook assumes readers have a basic understanding of the OMB's Digital Services Playbook, which provides strategies and best practices for creating digital services and emphasizes the importance of agile and iterative development as key components for success.

Throughout the acquisition lifecycle, the TechFAR Handbook highlights essential regulatory provisions of the FAR and explains how agile methods can be effectively and successfully implemented, staying true to the core principles of public procurement. These principles include impartiality, accountability, and ensuring taxpayer money is used to its best effect. While not a tutorial on agile software development, the handbook includes practical tips

and sample language drawn from agencies that have effectively used these methodologies to support their mission needs. That unknown collaborator turned out to be Traci Walker, who would later become my partner in driving meaningful change in federal procurement.

Shortly after the release of the TechFAR Handbook I received an unexpected call from the White House, inviting me for a lunch meeting to discuss my work in agile contracting. I expected a conversation about my experiences; however, it quickly became apparent that this was more than just a discussion. They presented me with an incredible opportunity to join the US Digital Service (USDS), a newly established presidential initiative. I was deeply honored by the offer, but skeptical that NGA would allow me to leave for this tour. To my surprise, upon returning to NGA, I was immediately informed I would go on detail to join the USDS.

My tenure at the USDS was an extraordinary experience, akin to being part of a start-up within the government. I found myself amid some of our nation's most talented technologists, all passionately united by a common mission to guide our nation into a new era of modernization.

During this time, the procurement team comprised just two strong, my good friend and colleague Traci Walker and me. Together, we formed a dynamic duo, tirelessly working to develop a range of tools, templates, policies, and training programs. Besides these internal responsibilities, we were regularly deployed to various agencies. In these roles, we provided essential support for their most critical technology acquisitions, tackling challenges and streamlining processes to facilitate the government's embrace of advanced

technology solutions. This experience at USDS was professionally enriching and pivotal in shaping my broader understanding of technology's potential in transforming government operations.

It wasn't long after starting at USDS, we recognized the need for additional support. We were in what we dubbed a "target rich environment" for IT acquisition reform. In our search for like-minded individuals who shared our principles, we faced a challenge: our innovative approach meant there were few people already skilled in these areas. This realization led us to devise the "Drones & Clones" strategy, a nod to the pervasive Star Wars culture within the Digital Service.

This strategy was two-pronged: first, to create a self-service resource hub where agencies could easily access the materials we were developing, allowing them to tap into our methodologies and insights. Second, we understood the critical need to educate COs on the nuances of modern technology procurement. By equipping COs with this knowledge, we aimed to scale our impact and foster a broader understanding and adoption of progressive IT acquisition practices across government agencies (and maybe snag a few great hires along the way).

The TechFAR Hub
When we first contemplated hosting our content, our initial thought was to collaborate with GSA and their Acquisition Hallways platform. However, we soon learned about their significant backlog, facing a wait time of approximately 12 months to get our site up and running. That is when it hit us, we were surrounded by some of the finest software engineers in the world at US Digital Services; why not leverage their expertise to build our site? Much to our

surprise, Erie Meyer offered a different kind of help: "I won't build it for you, but I will teach you how to do it."

As an acquisition expert, software and coding were not my forte, yet the prospect of learning to code was intriguing. Embracing this opportunity, I embarked on a journey of learning to code and web design. This was not a task I could dedicate my full workday to, so it became a project for nights and weekends. I started by forking an existing repository as my base and used the Digital Service Web Design Standards as a style guide. The process involved countless hours of arranging elements, aligning text, and uploading content. Ultimately, I created a fully functional website where anyone could access the valuable resources and tools we developed.

While others in the office would have built the site in a fraction of the time with greater technical finesse, the experience was rewarding. The sense of accomplishment I felt with the finished product, the TechFar Hub, was immense. The website continues to be a vital resource and serves as a testament to the power of initiative and the value of stepping outside one's comfort zone. Over time, the TechFar Hub has undergone several updates, but the core remains, and it is a reminder of what can be achieved when you take the lead and embrace new challenges.

DITAP
Amid my deep dive into coding, my colleague was spearheading the development of what would eventually be known as the Digital IT Acquisition Professional (DITAP) training program. Collaborating with OFPP, we conceptualized a training course aimed at elevating the expertise of contracting professionals. The goal was

to enable them to not only comprehend technical discussions but also to apply effective acquisition strategies in these contexts.

Opting for an innovative approach, we used the Challenge program to host a contest for creating an open-source curriculum, rather than running a traditional acquisition. This process involved a rigorous down-selection to determine the winning curriculum. The DITAP course was designed to be agile, allowing for continuous refinement based on feedback from users. Upon completion, students would receive a FAC-C certification, validating their enhanced skills and knowledge.

We actively participated in the course's evolution with the selected vendor. We co-led the instructional sessions, contributing our insights and experiences to enrich the curriculum. Following the success of the pilot program, the DITAP has evolved into a fully-fledged course. Several companies are now allowed to deliver its content. I have continued my involvement with DITAP as an independent consultant, teaching and sharing the knowledge I have gathered throughout my journey in digital IT acquisition.

Agile Acquisitions: People and Processes

This next chapter of the journey is designed to provide a detailed roadmap, guiding you through the nuances of how to execute agile acquisitions and offers a breakdown of the process, from critical roles to the initial stages of requirement identification, to the final stages of performance management.

You will learn how to navigate the complexities of procurement while fostering innovation, and how to lead teams towards successful outcomes. This section is intended to offer practical strategies, real-world examples, and actionable insights.

It aims to equip you with the tools, techniques, and mindset necessary to transform the theoretical knowledge you have acquired into effective, real-world acquisition strategies. This is where theory meets practice, where plans are transformed into action, and where you, as an acquisition professional, can truly make a difference in the landscape of government contracting.

Agile Organization, Roles, and Responsibilities

Transitioning to agile modular contracts presents several resource-related challenges for agencies. A primary concern is ensuring the availability of personnel with the right skill sets. For instance, the role of a PO is critical in agile environments. Some

agencies mistakenly equate POs with traditional Project Managers and merely re-title existing roles, but this approach is flawed. POs require distinct skills and real-world product delivery experience. To bridge this gap, one strategy is to hire experienced coaches who can mentor and support new POs, facilitating their transition into the role. Although the PO role is inherently governmental, involving resource allocation and technical direction, a project manager could potentially adapt to this role with the right training, support, and team if the agency faces challenges in hiring POs promptly.

Another challenge is the need for a larger number of Contracting Officer Representatives (CORs) to manage the increased volume of contracts. However, this is more a perceived problem than an actual one. Modular contracts are generally smaller and less complex than extensive software development contracts, allowing a COR to manage multiple contracts effectively. The PO's active involvement in daily contract management reduces the COR's workload significantly.

Concerns about contracting resources also emerge, as more contracts imply more meetings and administrative tasks. However, the actual workload per contract for COs is likely to decrease. This reduction is due to the separation of technical and contractual scopes, leading to fewer contract changes. Additionally, early awareness of potential challenges allows for proactive resolution, preventing them from escalating into significant problems.

Despite these challenges, agencies should not be deterred if they lack sufficient resources for a full transition to modular contracting. Starting small with a few test cases is a practical approach. This strategy allows agencies to identify and address resource

gaps and learning curves gradually. These initial steps in adopting agile modular contracts can provide valuable insights and pave the way for scaling the approach. Over time, the cost savings and efficiencies gained from agile modular contracting can justify further investment and expansion. The following section provides the key roles within an agile program, providing a more detailed understanding of their functions and importance.

Product Owner (PO)
The role of a PO is critical for the success of agile projects and product development. The PO serves as a key liaison between the development team and stakeholders, ensuring that product development aligns with the agency's goals and user needs. Here's an overview of their role:

- Defining the Vision: The PO is responsible for setting the vision for the product, aligned with the agency's strategic objectives and mission. They articulate what success looks like for the product and ensure all stakeholders have a common understanding of this vision.

- Backlog Management: One of the primary responsibilities of the PO is to manage the product backlog. This includes prioritizing backlog items (such as features, bug fixes, and technical work) based on the value to the mission and users.

- Stakeholder Communication: The PO maintains regular communication with various stakeholders, including end-users, agency leadership, and development teams. They must effectively communicate the product vision,

progress, and gather feedback to iteratively improve the product.

- <u>User-Centric Focus</u>: In the government context, the PO often deals with a diverse user base, including other government employees and the public. They need to ensure that the product meets user needs and addresses any specific requirements related to accessibility, security, and privacy.

- <u>Decision Making</u>: The PO is empowered to make key decisions regarding the product's features and functionalities. They must balance competing priorities and make decisions that best serve the company's goals and user needs.

- <u>Collaboration with Development Team</u>: The PO works closely with the development team, providing them with the necessary context and clarity on backlog items. They play a key role in sprint planning, reviews, and retrospectives.

- <u>Compliance and Regulations</u>: Understanding and ensuring compliance with federal regulations, policies, and security standards is a critical aspect of the PO's role in government projects.

- <u>Measuring and Reporting Progress</u>: They are responsible for tracking and reporting on the product's progress and performance, using metrics that are meaningful in a government context.

- Risk Management: Identifying and mitigating risks related to the product development process is an important part of their role.

- Continuous Learning and Adaptation: The PO must be open to learning and adapting, as government projects can have evolving requirements and priorities.

Product Manager
The role of a Product Manager, especially for projects with multiple product lines, is both critical and nuanced due to the unique constraints and requirements of government work. Here's an overview of their role in this context:

- Strategic Oversight: The Product Manager oversees the strategic direction of multiple product lines. This involves understanding and aligning with federal priorities, policies, and regulations that may impact product development.

- Inter-Product Alignment: They ensure that the various product lines are not only successful individually but also work cohesively within the larger project or program. This includes aligning the goals and functionalities of different product lines with the overarching mission objectives.

- Stakeholder Engagement: In a government setting, Product Managers frequently interact with a wide range of stakeholders, including agency leadership, end-users within the government, external partners, and possibly congressional oversight bodies. They must effectively

communicate the vision, progress, and challenges of the product lines to these diverse groups.

- <u>Resource Allocation and Budget Management</u>: They are responsible for managing budgets and resources across multiple product lines. This often involves navigating the complexities of federal budgeting processes and ensuring optimal use of taxpayer funds.

- <u>Compliance and Regulatory Adherence</u>: Ensuring that product development adheres to all relevant federal regulations, policies, and security standards is a critical part of their role.

- <u>Risk Management</u>: Product Managers in the federal government must be adept at identifying and mitigating risks associated with product development, including technological, operational, and regulatory risks.

- <u>User-Centric Approach</u>: Like their counterparts in the private sector, they must maintain a focus on the end user needs, which, in the case of federal projects, often include both public servants and citizens.

- <u>Cross-Agency Collaboration</u>: Often, government projects involve collaboration across multiple agencies. Product Managers need to navigate these inter-agency dynamics effectively.

- Innovation within Constraints: They are challenged to drive innovation while working within the often rigid and process-driven environment of the federal government.

- Reporting and Accountability: Government Product Managers have a heightened responsibility for reporting on progress, challenges, and successes of their products, and they must maintain accountability for public resources.

Project/Program Manager

The role of a Project/Program Manager (PM) differs from traditional project management roles due to the adaptive nature of agile methodologies. The PM in an agile government contract plays a pivotal role in facilitating, coordinating, and ensuring the successful execution of the project. Here are the key aspects of their role:

- Facilitation and Coordination: The PM is responsible for ensuring that the agile team has the resources, guidance, and environment necessary to succeed. This includes coordinating with different departments, managing resources, and resolving any impediments that the team may encounter.

- Communication and Reporting: Effective communication is crucial in agile projects. The PM serves as a bridge between the agile team, stakeholders, and senior management. They are responsible for keeping all parties informed about the company's progress, challenges, and changes.

- <u>Ensuring Alignment with Government Regulations and Standards</u>: The PM must ensure that the project adheres to government policies, regulations, and security standards. This is especially important in government contracts where compliance is critical.

- <u>Risk Management</u>: Agile PMs proactively identify and mitigate risks throughout the project lifecycle. They must be adept at foreseeing potential issues and addressing them before they impact the project.

- <u>Sprint Planning and Tracking</u>: While the PO manages the product backlog, the PM often assists in tracking progress against goals. They ensure that the team stays on track to meet the objectives and deadlines.

- <u>Stakeholder Engagement</u>: The PM engages with stakeholders to understand their needs and expectations, ensuring that the project delivers value. They also manage stakeholder communication and maintain relationships.

- <u>Resource Management</u>: Allocating and managing resources efficiently is a key responsibility. This includes not just human resources but also budget, tools, and technology required for the project.

- <u>Adapting to Change</u>: Agile PMs are flexible and adapt to changes in project scope, priorities, and requirements. They are skilled in navigating the dynamic environment of government projects.

- <u>Team Leadership and Support</u>: They provide leadership and support to the agile team, fostering a collaborative and productive environment. They also play a role in conflict resolution within the team.

- <u>Continuous Improvement</u>: Agile PMs encourage and facilitate continuous improvement practices within the team. They support retrospectives and other feedback mechanisms to enhance processes and outcomes.

Contracting Officer's Representative (COR)
The role of a COR is required for ensuring that contractual commitments are met while adapting to the dynamic nature of agile methodologies. The key responsibilities of a COR in this context include:

- <u>Monitoring Performance</u>: The COR actively monitors the contractor's performance against the contract's terms, conditions, and performance metrics. They ensure that the agile team delivers the agreed-upon product or service within the scope of the contract.

- <u>Facilitating Communication</u>: As a liaison between the government and the contractor, the COR facilitates effective communication. They ensure that all parties are aligned and that any issues or changes are communicated promptly.

- <u>Ensuring Compliance</u>: The COR checks compliance with government regulations, standards, and specific contract requirements. They ensure that all agile practices and

deliverables adhere to the necessary legal and regulatory frameworks.

- <u>Managing Changes</u>: The COR plays a key role in managing changes, ensuring that they are within the bounds of the contract and that any necessary modifications are approved by the CO.

- <u>Risk Management</u>: Identifying and mitigating risks is a critical part of the COR's role. They must foresee potential issues in the company's execution and work with the contractor to address these risks proactively.

- <u>Quality Assurance</u>: The COR oversees the quality of the work delivered by the contractor, ensuring it meets the government's standards and requirements. They may use various tools and techniques, such as reviews or user testing, to assess the quality of deliverables.

- <u>Supporting Agile Teams</u>: The COR provides support to agile teams, understanding the agile methodology and how it applies to the contract. They help resolve impediments that may affect the company's progress.

- <u>Reporting and Documentation</u>: The COR is responsible for maintaining accurate records and reports on contract performance, changes, and compliance issues. They document the progress and challenges of the project for government oversight.

- Problem Resolution: When issues arise, the COR works collaboratively with the contractor and government stakeholders to find solutions. They play a crucial role in resolving conflicts or misunderstandings related to contract execution.

- Advising on Contractual Matters: The COR provides advice on contractual matters to both the contractor and government team members, ensuring that everyone understands their roles, responsibilities, and the nuances of the agile approach.

Contracting Officer

In an agile government contract, the role of the CO is integral to ensuring the successful execution of the contract in line with agile principles. The CO's responsibilities include:

- Developing and Implementing Contracting Strategy: The CO is responsible for developing a contracting strategy that aligns with agile methodologies. This includes selecting the appropriate contract type, such as fixed-price or time-and-materials, which can accommodate the iterative nature of agile projects.

- Ensuring Regulatory Compliance: They ensure that all aspects of the procurement process comply with relevant laws, regulations, and policies. This includes adhering to the FAR while finding ways to incorporate agile practices within its framework.

- <u>Facilitating Agile Contracting Processes</u>: The CO plays a key role in adapting traditional contracting processes to support agile development. This may involve structuring contracts to allow for incremental delivery and acceptance of work products, and facilitating changes in scope or requirements in a manner that is compliant with contracting regulations.

- <u>Negotiating Contract Terms</u>: The CO negotiates contract terms with vendors, ensuring that the terms are flexible enough to accommodate changes typical in agile projects, such as shifts in project scope or timelines.

- <u>Managing Contract Modifications</u>: Agile projects require less modifications, however they still can require adjustments during performance. The CO is responsible for managing and approving contract modifications that reflect changes in project requirements, scope, or timelines.

- <u>Risk Management</u>: They identify and manage risks associated with the contract, including those unique to agile projects, such as the risk of scope creep or evolving requirements.

- <u>Performance Monitoring</u>: While the COR typically handles day-to-day monitoring, the CO oversees contract performance to ensure compliance with contractual terms and the successful delivery of project objectives.

- <u>Collaboration with Agile Teams</u>: The CO works closely with agile project teams, including POs and Scrum

Masters, to understand project needs and ensure that the contract supports these needs effectively.

- Vendor Relations and Communication: The CO maintains communication with vendors, ensuring clear understanding of contract requirements and agile expectations. They also handle disputes or issues that may arise with vendors during the project.

- Advisory Role: The CO advises project teams and agency leadership on procurement strategies, contract management, and how to best integrate agile practices within the constraints of government contracting.

Funding Agile

Congress appropriates different types of funding to track activities across the different agencies. This can cause complexities when acquiring agile services. There are several different types of funding and different agencies use different terminologies but the two primary types for acquiring custom SW are broken into development and sustainment dollars. This approach makes sense in a traditional waterfall structure where development and sustainment are distinct phases of the software lifecycle. However, the lines get blurred significantly in a continuous development model such as agile. Here is a basic overview of the two types of money and their purposes:

R&D Funds:
- Purpose: R&D funds are primarily allocated for research, development, testing, and evaluation activities. They

support the creation and advancement of new technologies, systems, prototypes, and innovations.

- Usage: These funds are used for exploring new ideas, developing technology, and bringing concepts from the drawing board to a prototype stage. This often involves scientific research, design, and extensive testing.

- Lifecycle Stage: R&D funds are typically used in the early stages of a project when new solutions are being created and tested before they are ready for full-scale production or deployment.

O&M Funds:
- Purpose: Operations & Maintenance funds are allocated for the day-to-day running and maintenance of existing systems and operations. These funds ensure the ongoing functionality and effectiveness of various programs and equipment.

- Usage: O&M funds cover expenses such as training, repairs, routine maintenance, fuel, spare parts, enhancements, and other costs associated with the regular operation of equipment and facilities.

- Lifecycle Stage: These funds are used during the operational phase of a project or system, once it has been developed, tested, and implemented. O&M funding supports the continual use, upkeep, and improvement of these systems.

Agencies struggle with creating agile contracts that reflect these appropriations because in agile development, the products are always in a stage of new development and maintenance. Under agile, a generic funding type would make more sense to avoid this confusion. Absent the availability of such appropriation, agencies are left having to artificially break the work apart, which may be conducted by the same people in any given sprint. Often the best option is to estimate, for example, an 80/20 split between development and sustainment. While this can work, it defeats the intended purpose and adds unnecessary complexity to contract execution and management for both the government and industry. Efforts such as the DoD's BA8 Software and Digital Services authority which establishes "no color" money for innovation is the best answer to this problem and Congress should be encouraged to expand these authorities.

Investment vs Budget

The high failure rate of government IT projects necessitates a shift towards a venture capital-like model, where smaller investments are made in multiple projects with shorter timelines, rather than committing vast resources to long-term projects. This approach allows for rapid validation of success or early detection of project failure, enabling swift adjustments and minimizing potential losses. Short project cycles aligned with a commensurate investment strategy will also ensure alignment with evolving user needs and adaptability to the fast-paced technological landscape. In a field where long-term projects risk becoming outdated by completion, this method ensures investments are aligned with the incorporation of the latest technology, maintaining relevance, and fostering innovation.

Adopting a venture capital-like approach can distribute risks across multiple initiatives. While some projects may not succeed, others have the potential to yield significant breakthroughs, a dynamic not possible with a single large investment. This model nurtures a culture of innovation, motivating teams to validate their concepts in a creative and effective environment, thus freeing up resources for additional capabilities. This can be achieved with a single contract as well, so long as the funding is provided in various stages of investment based on delivery of value.

The traditional model of aligning massive budgets towards a single vendor for extensive, long-term solutions is increasingly misaligned with the rapid technological advancements of the Information Age. In contrast, the venture capital approach aligns with the necessity for agility, flexibility, and quick adaptation in government IT projects, providing a more effective method to navigate the complexities of modern technology.

Treating projects as investments, with initial funding to assess solutions and subsequent investments based on value, encourages more purposeful development. This approach avoids unnecessary assumptions about project scope and scale, allowing competitive vendors to offer more tailored solutions within defined budget constraints. To facilitate this, government entities should use tools like the USDS TechFAR Hub Agile Estimator to create informed Independent Government Cost Estimates (IGCE), basing contract pricing on the composition and duration of project teams regardless of contract type. This modernized strategy promises a more dynamic and responsive approach to government IT project management.

Beyond the issue of how government budgeting is managed, something that in many ways, requires an act of Congress, a shorter term need is to focus on how to incentivize top talent to work with the government in the first place. Attracting top-tier engineering talent to government projects requires a balance between mission-driven incentives and realistic financial compensation. While organizations like the USDS and the General Services Administration's 18F have shown that world-class engineers can be drawn to work on projects that have a meaningful impact, akin to the motivation seen in civil servants, it's equally important to recognize the value of this talent in monetary terms. Emphasizing the mission is crucial, but it must be coupled with fair and competitive compensation. Relying on typically low government rates or pre-negotiated contract rate tables will generally not suffice when aiming to hire the best engineering firms.

The government must be prepared to invest appropriately to secure top talent. Skimping on costs per hour leads to hiring less capable engineers, which will ultimately result in lower quality outputs, higher long-term costs, or inferior solutions. A clear product vision remains essential for guiding the company's direction. However, this vision must be supported by a willingness to allocate the necessary budget to attract and retain the level of expertise required for the company's success. This approach ensures not only that the mission is compelling but also that the financial aspects are aligned with the goal of securing the best possible talent for the project.

Agile Requirements

Non-traditional vendors are an essential component of modernizing government systems. It is important to remember when working

with these companies that they were not created around government processes. The FAR council has addressed this concept and is covered under FAR Parts 12, Acquisition of Commercial Products and 13, Simplified Acquisition Procedures. Requirements should be developed accordingly.

When evaluating if a requirements document is well-suited for agile development, there are specific terms and concepts to look for:

- **User Research/Feedback/Centered Design:** Agile development prioritizes the user, so the document should emphasize user research, feedback mechanisms, and user-centered design. This focus ensures the product meets end-user needs and adapts based on their input.

- **Automated Testing:** Check for references to automated testing, an essential component in agile development. It ensures quality and efficiency, supporting rapid iterations throughout the development cycle.

- **Metrics:** Agile development uses specific metrics to track progress. Look for mentions of relevant metrics or key performance indicators (KPIs) that align with agile methodologies, like sprint velocity or backlog completion rates.

- **Agile Roadmap:** Agile projects do not use an Integrated Master Schedule (IMS). Agile thrives on flexibility, which can be restricted by rigid scheduling, so its absence is often a positive indicator. Instead, an agile program will use a Roadmap, which is a living document not tied to the contract.

- **Clear Definition of Done:** Having a well-defined "Definition of Done" is the heart of agile projects. It ensures a shared understanding of completion for tasks or sprints, helping maintain consistency and quality.

These elements can help determine whether the requirements document supports an agile development approach. Agile is based on core practices, so these terms should align with an overall tone that reflects agile values like collaboration, adaptability, and continuous improvement.

The contractual and technical requirements of an agile contract are separate. The contractual requirements will detail the scope, period of performance, and price. The technical requirements will exist outside the contract in program documents and agile management tools such as JIRA. These can and should change based on user feedback. This is why a SOW is the least preferred requirement document in agile contracting, in that it prescribes not only the what but also the how the contract will be performed. In this case you are not allowing flexibility from the vendor and locking down the technical requirements. The following sections outline the characteristics of the different requirement documents.

The technical execution of the project should be at the discretion of the PO. Choosing the right requirements document is critical to achieving the outcomes above. The most common approach is to utilize a Statement of Objectives (SOO) to highlight the key objectives of the requirement and allow industry to provide their innovative solutions. Typically, a Statement of Objectives (SOO) will be followed by a Performance Work Statement (PWS) which is developed by the vendor as part of their proposal and then is

negotiated before it is awarded. It is not advisable for the government to prescribe the PWS as they will inevitably force the vendor to follow processes that limit their creativity and prevent them from using their expertise, consequently reducing efficiency. The PWS will detail the ways in which the vendor will meet the objectives, it should not be a detailed description of what will be delivered. A PWS should be accompanied by a quality assurance surveillance plan (QASP). These artifacts can be created with vendors after selection to maximize the implementation approach. When selecting a requirements document one can leverage the hierarchy and characteristics of different types of documents. The order of precedence, as per FAR Part 11.101, Selecting and Developing Requirements Documents, guides agencies in choosing, modifying, or creating such documents. This hierarchy prioritizes documents mandated by law, followed by performance-oriented documents, design-oriented documents, and standards or specifications issued outside the defense or federal series.

Selecting A Requirements Document

The choice of requirements document is pivotal in shaping the approach to procurement. The SOO is the most appropriate selection for agile contracts. It focuses on desired outcomes and offers maximum flexibility in approach. The SOO emphasizes achieving outcomes over outputs and avoids detailing how to accomplish them. Due to its open-ended nature, the SOO requires more management attention and is typically coupled with a QASP to measure performance.

Following the SOO, the PWS concentrates on performance criteria (the "what") rather than the process (the "how"). It provides

flexibility and allows for adaptation based on ongoing learning, often derived from the SOO with detailed constraints and assumptions. The PWS also requires a QASP for performance monitoring.

The SOW is more detailed and prescriptive, specifying both requirements and processes. It tends to result in similar approaches due to its prescriptive nature, focusing on the "how", which often leads to limited flexibility and innovation. Unlike the SOO and PWS, the SOW does not typically require a QASP, as the focus is primarily on compliance with outlined requirements.

For each type of requirements document, there are key considerations. The SOO limits specifications to only essential outcomes and measures performance through mutually agreed methods, allowing for innovative approaches, typically including a QASP. The PWS, driven by the overall product vision and SOO, clearly states constraints and assumptions, and encourages innovative solutions within the stated performance criteria. On the other hand, the SOW tends to be lengthy and restricts approaches to those outlined in the document. This can stifle creativity due to its focus on detailed processes and methodologies, often leading to uniform solutions that strictly adhere to the SOW's guidelines.

Use Phased Selections

The amount of effort required by industry and evaluators should be commensurate with each offeror's likelihood of success. When developing the Source Selection Plan (SSP) and Request for Offer (RFx) consider using a phased approach. This reduces the risk of protest by removing non-competitive vendors earlier in the process reducing waste for both industry and government. One method for

executing phased selections is to use CSOs. This approach represents a merit-based source selection technique for procuring innovative commercial items, technologies, or services. These solutions are aimed at directly addressing specific requirements, bridging capability gaps, or offering potential technological advancements. Primarily targeting businesses or institutions that have not traditionally engaged with the U.S. Government, CSOs are applicable for a range of R&D solutions, from the development of advanced components to the creation of operational systems. CSOs were initially authorized under Section 879 of the FY17 National Defense Authorization Act (NDAA) and gained permanent authority for the DoD through Section 803 of the FY22 NDAA, to be incorporated into 10 U.S.C. §3458, Authority to Acquire Innovation Commercial Products and Services Using General Solicitation Procedures.

This authority has been extended to DHS and GSA and can be accessed by other federal agencies through assisted acquisitions. The Procurement Innovation Resource Center (PIRC) has been established to assist the federal government in acquiring cutting-edge technologies. It also initiated a pilot program designed for competitive procurement of innovative commercial items. This includes products, technologies, and services currently in the production or commercialization phase, and modifications of existing commercial items, using the CSO procedure. The CSO pilot program is aimed at aiding the GSA and other federal agencies, through assisted acquisitions, in obtaining emerging technologies. The goal is to enhance services for citizens while also ensuring these solutions are cost-effective for taxpayers.

One of the advantages of the down selection process is the option to use a tech challenge where vendors respond to a coding assignment.

This method lets the evaluators fully assess not only the quality of the company's coding skills but also the way they work together to solve problems and prioritize requirements. Another advantage of this approach is that you can see who they bring to the project and what role they play. It is important to remember that for a small business, a code challenge is a big ask. It typically means that some of their top people will be pulled away from current projects to focus on the assignment, so this approach should only be used when the agency has the technical skill sets available to properly evaluate the submission. The TechFAR Hub Tech Challenge Playbook provides specific approaches for utilizing this evaluation technique. To fully evaluate a vendor's capability, it is critical to have a diverse representation of expertise as part of the source selection team. Tech challenges specifically require engineers who understand coding best practices to properly evaluate the way in which the vendors attempted to solve the given challenge. Given the importance of UX/UCD, including members with those skill sets will help evaluate how the prospective companies think about these functions as well. Besides core technical areas, other stakeholders should be considered as well.

Deliverables

The traditional deliverables associated with government contracting focus on paper over products. Since under waterfall, tangible deliverables are not received until long after large investments have been made, comprehensive reporting was developed to attempt to predict the likelihood of maintaining cost, schedule, and performance and provide stakeholders with some sense of control. Regardless, empirical evidence has shown it has had little success. Even if we assumed that systems such as the Earned Value Management

System (EVMS) did improve outcomes under waterfall, they are not necessary under agile programs, because the functional product is being delivered every iteration. As such, stakeholders can see exactly what they are getting for every dollar that is being paid. The result is a much more efficient and practical list of deliverables that measure the quality and trends of the delivery with only the essential necessary documentation to monitor the program. The following are a list of possible deliverables under an agile contract:

- Company Roster

- Open Repositories

    » Executable files

    » Commit notes

- Burn Down Charts

- GFP List

- Automated Testing results

- Code Coverage

- Defect Rate

- Collaboration Tool Access (e.g., JIRA)

    » Sprint Plan

» Sprint Review

» Sprint Retrospective Notes

» Backlog

» Roadmap

» User Stories

Measuring Agile Delivery, KPIs, and Metrics – Status Reporting

A myth associated with the adoption of agile methodologies by government agencies is that these approaches lack accountability due to their general lack of defined deliverables. However, an effectively structured agile contract can indeed ensure vendor accountability. The process starts with a SOO, which articulates the agency's goals drawn from the overarching product vision. This SOO is crucial as it sets the direction and expectations for the project.

Following the SOO, a PWS is developed, which could be either vendor-generated or a collaborative effort between the vendor and the government. The PWS is instrumental in detailing the operational framework of the project. It delineates roles and responsibilities, outlines the management of the project backlog, and establishes the governance structure that will guide the company's execution. Central to the PWS is the inclusion of a clear "definition of done", a critical element that specifies when a task or project segment is considered complete and satisfactory. This definition is essential

for measuring progress and ensuring that deliverables meet the agreed-upon standards and objectives.

However, even with these structures in place, disputes can arise during the development process. To proactively address potential disagreements, the PWS should incorporate a detailed dispute resolution process. This process should clearly outline the steps to be taken in case of disagreements, identify the parties involved in resolving disputes, and establish who holds the final decision-making authority. By including these provisions, the contract ensures that there are mechanisms in place to handle conflicts effectively, thereby maintaining project momentum and alignment with objectives.

While agile contracts might seem less rigid in terms of deliverables compared to traditional models, they can, through well-crafted SOOs and PWSs, provide a framework that ensures accountability and effective dispute resolution. This structure not only upholds project integrity but also aligns the vendor's efforts with the agency's strategic objectives, ultimately leading to successful project outcomes and user satisfaction.

Measuring success of the program transitions similarly as the deliverables when executing an agile program. The metrics should align with the quality of the products being delivered and the user's feedback. Following trends in delivery will allow for the appropriate tuning of the process. The more finely tuned the process the more accurately the team will be able to predict delivery levels and the more confidence stakeholders will have.

In agile government contracts, the measurement of delivery,

performance indicators, and metrics is a dynamic and integral part of the process. This involves focusing on various key performance indicators (KPIs) and metrics that adhere to agile principles, providing insights into the status and quality of the work being undertaken. Status reporting in agile is distinctively more interactive and frequent compared to traditional project methodologies.

A key aspect of this approach is capacity which represents the amount of work a team can complete over a given sprint paired with velocity, which measures the amount of work a team actually completes over a set of sprints (typically 3-6). These measurements offer insights into team productivity and enable forecasting. Another essential tool is the use of burn-down and burn-up charts; while burn-down charts track the remaining workload against time, burn-up charts contrast completed work against the total scope. Assessing these trends and the achievement of sprint goals is critical for understanding the team's effectiveness and its ability to consistently deliver value.

Lead time measures the duration from when work is requested to its delivery, and cycle time covers the period taken to complete work once it's begun. These metrics are indicators of the process efficiency, while quality metrics, such as the number of defects or bugs, their severity, and resolution time, are indicative of the overall process quality.

Customer satisfaction remains a cornerstone in agile methodologies, ensuring that product development aligns with user needs and expectations. This is complemented by team health metrics, which include aspects like team morale, collaboration levels, and

overall satisfaction, as a healthy and harmonious team is generally more productive and innovative.

Agile status reporting emphasizes frequent and transparent communication, often utilizing visual representations over lengthy written reports. Regular meetings such as daily stand-ups or sprint reviews provide platforms for discussing progress, addressing challenges, and planning future steps. Effective agile status reporting and KPI tracking balance quantitative data with qualitative insights, aiming for continuous improvement, adaptability, and delivery of high-value outcomes.

Key Factors

- The most important delivery is the working product

- Pay the vendor for the process that results in the product

- It is not about how much, it is about how good

- User burn-down chart to measure trends

- All code should be developed in an open repository with shared access and executable code

- All products are evaluated against a definition of done. Done is measured by accessibility, security, and usability testing

- Sprints should be time boxed, not exceeding four weeks at the most

- Use sprint reviews to evaluate the delivery

- Use sprint retrospectives to evaluate the process

- Definition of Done

Chapter 6:

The Industry Perspective

In March 2019, I decided to leave USDS after 4.5 years of dedicated service to focus on my consulting business full-time. But life, as it often does, had different plans for me. I received a call from Chris Lynch, Director of the Defense Digital Service (DDS), who asked to meet for coffee. As I made my way to the Pentagon, I prepared myself to inform Chris of my decision to leave. However, as it would turn-out, I wasn't the only one preparing for my next challenge. Chris was planning to leave DDS to start a new venture capital-backed software company focused on defense and national security, and he needed me to be part of the founding team.

Chris outlined his vision for the company, along with the substantial financial backing and advisory support. The opportunity to be a part of this innovative endeavor was too compelling to pass up. Until that point, my focus had been primarily on advocating for the adoption of agile services within the government. While this was a crucial and fulfilling task, it had its limitations in terms of scalability. Agile services are excellent for addressing specific problems, but the government's vast array of technical challenges required a more scalable solution.

Joining this venture meant embarking on a new mission: to develop a scalable software approach that could address a broader range of government technical needs at a fraction of the cost. This transition

marked a significant shift in my career, moving from promoting agile services within the government to pioneering a scalable software solution for the defense and national security sector. It was a step towards impacting change at a larger scale.

My tenure at Rebellion Defense was an extraordinary chapter in my professional life, akin to undergoing an intensive, real-world PhD program. Initially serving as the Senior Director for Contracts and Business Operations, I managed a broad spectrum of areas including contracts, proposals, pricing, and revenue operations. Later, as I stepped into the Chief of Staff role, the depth and breadth of my experiences expanded significantly.

The startup environment at Rebellion Defense was exhilarating and challenging in equal measure. Selling to the government, particularly when introducing innovative models like early-stage, VC-backed SaaS, was a complex and educative journey. It was a vivid illustration of the "valley of death" phenomenon in startups, where transitioning early successes into sustained growth proved to be an immensely difficult task.

Engaging with Capitol Hill was an effective strategy to help shape legislation favorably towards initiatives. I actually learned this lesson before leaving the government, but it proved even more so once in industry. My admiration for Hill staffers is immense. They perform a challenging and relentless job with an unwavering commitment to tight deadlines. Their passion for serving the nation is both clear and inspiring. Growing up, "SchoolHouse Rock" gave me a basic understanding of how laws were made. However, it was not until I started working closely with the Hill that I fully grasped the dynamic and malleable nature of the legislative process. I learned

that with dedication and alignment to legislative priorities, one could significantly influence the specifics of a bill.

During one interaction, while discussing the Department's hesitance towards agile practices, I half-jokingly suggested that it should be mandated by law. To my astonishment, the response was encouraging: "If you write it, we will endorse it."

Seizing this opportunity, I drafted a bill to promote the adoption of agile practices. While the process was more labor-intensive than I initially thought, it was driven by my passion. My proposed draft, initially titled "Jmo's Law" (an abbreviation of my name), went through various revisions and stakeholder inputs. Ultimately, it was passed into law, albeit under a more formal title. This achievement marked a significant personal milestone and fueled my ongoing commitment to working with the Hill. I continued to provide legislative input, with several of my recommendations being incorporated into law. This experience was a powerful reminder of the impact one can have with proactive engagement; "nobody is coming"—i.e., if you want something done you need to take the initiative.

As the company scaled, the challenges evolved. From the intimacy of a small team where everyone knew each other, to a larger organization with faces I never got to meet, each phase presented its unique learning opportunities. The onset of the COVID-19 pandemic added a layer of complexity, testing our adaptability and resilience. Navigating the intricacies of obtaining a Facility Clearance (FCL) and establishing a Sensitive Compartmented Information Facility (SCIF) were challenging to say the least. Moreover, adapting to the

shifting priorities of the DoD, often in response to global events, was a continuous learning curve.

My experience at Rebellion Defense was a comprehensive learning experience, one I would encourage anyone to consider, rich with lessons giving me more empathy to the challenges industry faces. This journey profoundly enhanced my understanding, skills, and insights, contributing significantly to my professional growth and expertise. After four years (which is more like 10 in a start-up) I left to pursue my prior dream of running my consulting business taking what I have learned over my career to support government agencies and industry with agile adoption and innovation.

Working with Traditional, Non-Traditional, & Transitional Vendors

In the world of acquiring agile development services, I see three categories of vendors. Understanding the perspective of these vendors can provide insight into how an agency ought to interact with them and the extent to which their concerns should be prioritized.

- **The Traditional:** Vendors that have been created over some significant period, optimized for the way the government has always bought technology.

- **The Non-Traditional:** Vendors new to the government that bring the best of modern tech and methods but are prone to gaffes or rudimentary misunderstandings because of their unfamiliarity with the government bureaucracy.

- **The Transitional:** Vendors composed of either of the two above but who are attempting to adapt to the new environment.

The Traditional

Often demonized, the Traditional vendor represents all the things that the agile enthusiast would like to point to as what is wrong with the system. But the Traditional company is merely a reflection of ourselves. They are exactly what the government has demanded for the past 50-100 years. They have invested significant resources to create the structures required of them (e.g., cost accounting systems or CAS, travel policies, pay structures) and they have received beatings when multi-billion dollar programs have failed. It is not surprising they push back on the lack of details in requirements or changing the proposal process from "tell to show." They have robust proposal teams designed around the complex and laborious proposal process. They have built staffing pipelines to manage the government's ever-changing needs and requirements, so it should not come as a surprise when they balk at short periods of performance and small MVP-focused projects. The question then, should the government entertain the cries of Frankenstein's monster? From my perspective, they have experience, and for that, we would be wise to listen to their concerns, but we should not abandon modernization for their sake, industry will always adapt.

There is also an element of reality here. As fast as the government is changing, it will probably never make a full transition to agile and agile will probably be replaced by something else long before it ever gets close. Traditional vendors know this, and they also know that the major acquisitions of significant dollars will probably remain as traditional contracts; their incentive to change is largely devalued.

These vendors have watched the pendulum swing numerous times and are biding their time. While this may sound dark, it is not. The government is enormous, and an element of stability is required during a period of change. Further, it is necessary to understand one's environment if there is any hope to change it. While there will always be this reality, there is also a reality where the culture around acquisitions and technology changes; every program that is modernized and every acquisition that is optimized will save significant money and add tremendous value to users across the country. The traditional vendors will adapt as needed to maintain their position. Change is not measured in statistics; it is measured in the delivery of value.

"The Non-Traditional"

The Non-Traditional company is the cool niche company that is probably based anywhere but the Beltway and has a proven record of delivering good tech in the private sector. If only we could get them to do that for the government, we would be fast, and cool too. But the government differs from the private sector. The government is difficult to work with, offers a low labor rate, has burdensome requirements that may seem threatening to a private company, and takes incredibly long to make decisions. Congress and government thought leaders have developed numerous opportunities, authorities, and strategies to mitigate many of these problems, but culturally the government operates from a position of "Risk Mitigation" and the private sector operates from a "Risk Optimization" perspective . And that difference will never be resolved by new laws or regulations, only through small victories and demonstrated success. This hazardous environment creates challenges and opportunities for vendors to make mistakes or accept bad deals. The questions and concerns here are legitimate and often help the government

see its biggest flaws as only an outside perspective can. To bring new companies into the marketplace is a noble cause and while it adds tremendous value, it is not the answer for everything. While the risk for these vendors is high, having a reliable fixed revenue stream at the scale the government spends is often too enticing for these companies to ignore.

"The Transitional"
The Transitional company is one of the two aforementioned and has either "read the tea leaves" or learned from its mistakes and adapted its operating model to address the issues above. This looks very different between the two, but at the core, is an understanding that "the way we have always done it" will not cut it. Just as the government needs an outside perspective, so do these companies. There are investments and retooling required to address the intended nimbleness of the new acquisitions and delivery models and the rigidity of bureaucracy which will always remain. This group offers the most hope and the most value in engagement with them, all the lessons around user-centered design should be applied here. To this day I credit my initial success to the three months I spent, in 2010, interviewing traditional vendors and asking how they would do things differently.

It Shouldn't Be This Hard

…but it is. Selling to the federal government is hard. When you consider the 2,368 pages of federal regulations governing acquisitions (not even including agency specific regulations), the funding constraints, the myriad of contracting vehicles, and simply the culture of silence around procurements, selling to the federal

government is hard; but it does not have to be. The following section is intended to help companies that are working in this space.

Emphasize Business Development

Business development in the federal marketplace is an intricate art that balances strategic timing, resource management, and relationship-building. Understanding when acquisitions will be announced is pivotal. If a vendor is first finding out about an opportunity when it is posted on Sam.gov, they are already behind. Companies must not only be ready to respond quickly but also ensure that their proposals are of high quality and within budget. Judicious management of bid and proposal budgets is essential. It is a balancing act between influencing requirements, being prepared to seize opportunities, and avoiding overextension.

In today's digital age, there are sophisticated software solutions available that track federal opportunities. These tools, despite their cost, can offer efficiency and strategic insights that are far superior to manually sifting through databases like SAM.gov. These solutions enable companies to identify opportunities early, giving them a head start in the engagement and preparation process.

Technology is just one piece of the puzzle. Networking and relationship-building are equally, if not more, important. In the realm of federal acquisitions, who you know can be as crucial as what you know. Building and maintaining relationships with key stakeholders in the industry and government can provide invaluable insights and opportunities that are not always apparent from public sources. Engaging with Value Added Resellers (VARs) is a strategic way to extend your company's reach. VARs can act as extensions of your sales force, promoting your products or services with no

proportional increase in your workforce. They often have established relationships, contracts, and a deep understanding of the federal market, which can be leveraged to your advantage.

However, effective targeting is crucial. Directly contacting COs may not always yield the desired results. COs are typically focused on managing current contracts and may not have the bandwidth or willingness to discuss potential new opportunities or innovations. A more fruitful approach is to direct your efforts towards senior leaders and program managers. These individuals are key decision-makers, often responsible for defining project requirements and directing resources. They can understand and appreciate the value your company can bring to a project. Successfully selling to the government requires bringing together multiple pieces at the same time, in the right way, to make something happen. In my experience, successful sales campaigns need four elements:

- An end-user who will directly benefit from your product or service. They will give you feedback, and they should be ready to fight for you - because they'll have to.

- A program manager who owns the requirement and budget.

- A senior leader / champion who is fed up with the status quo and isn't willing to take it anymore (can sometimes be the same as 2, but is rarely the same as 1)

- A CO who understands the strategic value of the procurement and is motivated to work with you to get to yes.

Understanding the nuances of each agency's mission and how your offerings align with their objectives can significantly increase your chances of success. Tailoring your approach to each agency's specific needs and challenges demonstrates a depth of understanding and commitment that can set your company apart from competitors.

Effective business development in the federal space requires a multifaceted approach. It involves leveraging technological tools for market intelligence, cultivating strong relationships within industry, and strategically targeting key decision-makers who have the authority and need for your solutions. This comprehensive approach can significantly enhance your company's prospects in the competitive federal marketplace.

Aim Small, Miss Small
The "Aim Small, Miss Small" philosophy emphasizes the importance of specialization in the field of government contracting. In a field as diverse and complex as federal procurement, the temptation to diversify and bid on a wide range of contracts can be alluring. However, this approach often leads to spreading your resources too thin and diluting your company's core competencies. Specialization allows your company to focus on its strengths and develop a deep understanding of specific areas.

Focusing on your company's unique skills and the specific problems you are passionate about solving can set you apart in an otherwise crowded market. The federal government, with its vast array of needs and challenges, presents abundant opportunities that align with a wide range of specialized niches. By honing your expertise in a particular area, you can position your company as a leader in that field. This expertise not only enhances the quality of your

proposals but also increases your credibility and value in the eyes of government clients.

When considering government contracts, it's essential to evaluate how well they align with your company's expertise. Bidding on projects that only partially match your capabilities can lead to less than optimal offerings. This not only affects your chances of winning the contract but can also impact your company's reputation and future opportunities. Instead, strive to bid on projects where your company can truly excel and provide exceptional value.

Encouraging the government to break down larger, more general contracts into smaller, more specialized parts can lead to opportunities that better align with your company's strengths. While influencing procurement processes in this way can be challenging, it is a strategy worth deploying, particularly for small businesses that might find it difficult to compete on larger contracts.

Another effective strategy is forming partnerships with other companies. Collaborating with businesses that complement your capabilities can allow you to tackle a broader scope of requirements effectively. These partnerships can enable you to offer comprehensive solutions that meet the government's needs more fully, increasing your chances of success. When forming these partnerships, it's important to choose companies that not only complement your skills but also share similar values and work ethics. This alignment ensures the partnership is seamless and productive.

Adopting an "Aim Small, Miss Small" approach means concentrating on your company's unique strengths and areas of specialization. It is about being selective in the opportunities you pursue,

ensuring they align with your expertise, and forming strategic partnerships to enhance your offerings. This focused approach can lead to greater success in the competitive arena of government contracting, enabling your company to deliver high-quality, targeted solutions that truly meet the government's needs.

Size Matters

The size of a company plays an important role in navigating the federal procurement landscape, especially for small businesses. One of the key regulations that highlight this is the "rule of two" found in FAR Part 19, Small Business Programs. This rule stipulates that if there are at least two small businesses that are willing and able to fulfill the requirements of a contract at a fair market price, the government is compelled to set aside that opportunity for small businesses. This rule levels the playing field and gives small businesses a fair chance to compete for government contracts.

Small businesses should actively respond to Requests For Information (RFIs) to show their interest and capabilities. While responding to RFIs does not guarantee a contract will be set aside for small businesses, it can influence the government's acquisition strategy. Agencies often use RFIs to gauge the market and understand the capabilities available among potential suppliers. If small businesses can collectively show that they have the requisite skills and resources to meet the contract requirements, it increases the likelihood of a set-aside.

It is equally important for small businesses to maintain a realistic assessment of their capacity to fulfill government contracts. The requirements for government contracts can be complex and often subject to change, sometimes even mid-contract. This dynamic

nature means that a small business must have not only the initial capability to meet the requirements but also the flexibility and resources to adapt to changes. Over-committing to a contract that surpasses your company's capacity can lead to performance issues, which will affect your reputation and ability to secure future contracts.

In addition to leveraging the "rule of two", small businesses should also explore other programs and set asides designed to support them. These include the SBIR/STTR programs and various other set-asides for women-owned, veteran-owned, and disadvantaged businesses. These programs can provide small businesses additional opportunities to compete within the federal market.

Small businesses can also consider forming joint ventures or partnerships to enhance their capabilities and resources. By combining strengths, small businesses can more effectively compete with larger companies, fulfilling more extensive or complex requirements.

Disadvantaged = Advantaged in government Contracting
FAR Part 19 provides significant opportunities for businesses with certain disadvantaged statuses to compete more effectively in the federal marketplace. This includes businesses with 8a certification, which is specifically designed to assist small, disadvantaged businesses in gaining access to government contracting opportunities and receive direct awards. Service Disabled Veteran-Owned Small Businesses (SDVOSB) also receive preferential treatment in federal procurements especially at the Veterans Affairs (VA). These set-asides are powerful tools for promoting diversity and equality in government contracting.

For businesses that do not inherently qualify for these set-asides, forming joint ventures or partnerships with businesses that do can be a strategic move. Such collaborations can enable companies to leverage the benefits of these set-asides, increasing their chances of winning federal contracts. This approach can be beneficial for businesses seeking to enter the federal market or expand their footprint in this space.

Other significant set-asides include those for woman-owned small businesses and businesses in historically underutilized business zones (HubZones). The HubZone designations aim to empower businesses in traditionally marginalized or underserved communities by providing them greater access to federal contracting opportunities. By qualifying for these programs, businesses can compete in a less crowded field, increasing their chances of securing government contracts.

Businesses with disadvantaged status should actively market their certification and unique selling points to relevant government agencies. This could involve attending industry days, participating in federal outreach programs, and building relationships with agency procurement officers. It is also important for these businesses to keep abreast of changes in federal procurement policies and adapt their strategies accordingly.

Disadvantaged business status also opens doors to networking and mentorship opportunities through various government programs. These programs can provide invaluable guidance, resources, and exposure, helping businesses navigate the complexities of federal contracting more effectively.

Leveraging your business status in federal contracting involves a combination of utilizing set-asides, forming strategic partnerships, responding actively to RFIs, and actively marketing your business to government agencies. By capitalizing on these opportunities, disadvantaged businesses can significantly enhance their competitive edge in the federal procurement landscape. This approach not only benefits the individual businesses but also supports the government's objective of creating a diverse and inclusive supplier base.

CMS: 8a—"The Deal"
During one of my deployments with the USDS, I was supporting the Centers for Medicare & Medicaid Services (CMS) on a significant acquisition. This project aimed to establish a large IT omnibus vehicle, with planning that had been ongoing for over a year. With a budget running into the hundreds of millions, the strategy was initially set for a single award.

I remember sitting at the leadership table as they discussed the final stages of the plan. After calculating some figures, I intervened, noting, "My back-of-napkin math suggests you will hire over 500 contractors for this effort; this is more than the total employees at google." This comment was met with a moment of stunned silence before someone acknowledged that the number might be even higher.

I questioned the timeline for the award, learning that it was expected to take eight to twelve months for the award and three to five years for development. Seizing the opportunity, I proposed an alternative. If they paused this acquisition, I would leverage the 8a program and secure a vendor to deliver working software within 3 months.

However, the condition was that if I succeeded, they would have to cancel the original acquisition and shift to a multiple award vehicle focused solely on agile vendors. While there was skepticism about the feasibility of delivering working software in such a short time frame, they agreed, likely to humor my proposition.

To their astonishment, I delivered on my promise within the three-month window. This achievement not only proved the effectiveness of agile methodologies and the value of FAR Part 19.5, but also paved the way for one of the federal government's first agile ordering vehicles, marking a significant shift in how government IT acquisitions could be approached.

Consider the Pros and Cons of GSA Schedules
GSA schedules, found under FAR Part 8.4, Federal Supply Schedules, are long-term government-wide contracts with firms that provide access to millions of products and services at volume discount pricing. They are a vital tool for businesses looking to sell to the federal government. However, getting and maintaining a GSA schedule involves both advantages and challenges.

Pros of GSA Schedules:

- Streamlined Procurement Process: Being on a GSA schedule simplifies the procurement process for both the government buyer and the seller. It allows government agencies to purchase goods and services directly from the GSA schedule holder, bypassing some of the more complex and time-consuming steps of the traditional procurement process.

- <u>Access to a Larger Market</u>: Having a GSA schedule opens doors to a wider range of federal agencies and can increase a company's visibility and credibility as a trusted government contractor.

- <u>Pricing Advantages</u>: GSA schedules can offer pricing advantages. Because of the volume of products and services purchased through these schedules, businesses often offer competitive pricing, which can be more attractive to government buyers.

- <u>Reduced Competition</u>: GSA contracts typically involve less competition than open market procurements, as only companies holding a GSA schedule contract can compete for orders.

<u>Cons of GSA Schedules:</u>

- <u>Complex Application Process</u>: Getting a GSA schedule can be a lengthy and complex process, involving detailed proposals, negotiations, and compliance with specific requirements. This can be challenging for small businesses without dedicated resources for contract management.

- <u>Costs</u>: There are costs associated with applying for and maintaining a GSA schedule, including administrative costs, potential need for consultants, and the time and effort required to comply with GSA's reporting and pricing policies.

- <u>No Guaranteed Business</u>: Being on a GSA schedule does not guarantee sales. Companies must still actively market their services to government buyers and compete for individual orders.

- <u>Ongoing Compliance Requirements</u>: GSA schedule holders must comply with a variety of terms and conditions, including pricing policies and sales reporting. Failure to comply can result in penalties or loss of schedule.

For many businesses, particularly those new to government contracting, navigating the GSA schedule application process can be daunting. Seeking professional help, such as consultants who specialize in GSA schedule proposals, may be required. These professionals can provide expertise in contract negotiations, pricing strategies, and compliance requirements.

While GSA schedules offer a streamlined path to federal contracting opportunities, they require careful consideration of their complexities and ongoing obligations. Weighing the pros and cons and assessing the alignment with your business's capabilities and resources is necessary before pursuing a GSA schedule. For those companies that can navigate these challenges, GSA schedules can be a powerful tool for expanding their government contracting business.

Be Open to Subcontracting Roles
The aspiration to become a prime contractor is a common goal for many small businesses venturing into government contracting. Being a prime contractor offers direct engagement with the government, control over project execution, and valuable past

performance credentials. However, the path to becoming a success-ful prime contractor often begins with taking on subcontracting roles. Embracing these opportunities can offer several strategic benefits.

<u>Gaining Experience and Credibility</u>: Subcontracting allows busi-nesses to gain hands-on experience in government projects without the full weight of prime contractor responsibilities. This experience is invaluable for understanding the complexities of government contracts, including compliance with regulations, meeting strin-gent quality standards, and navigating the reporting requirements.

<u>Reducing Administrative and Financial Burdens</u>: As a subcontrac-tor, the administrative and financial burdens are lower than those of a prime contractor. Subcontractors are typically not directly responsible for the extensive paperwork and compliance require-ments that prime contractors must manage. This reduced burden allows small businesses to focus on their area of expertise and deliver quality work.

<u>Building Relationships and Networks</u>: Working as a subcontractor provides opportunities to build relationships with prime contractors and other key players in the industry. These relationships can lead to more subcontracting opportunities and can be beneficial when the business is ready to bid for prime contracts.

<u>Establishing a Track Record</u>: Successful subcontracting assign-ments contribute to building a track record and portfolio of past performance. This track record is necessary when bidding for prime contracts, as it shows the company's capability and reliability.

<u>Learning from Established Contractors</u>: Working under a prime contractor allows subcontractors to learn best practices and understand the nuances of managing large-scale government contracts. This knowledge is useful for businesses planning to transition to prime contracting roles in the future.

<u>Mitigating Risk</u>: Subcontracting offers a way to take part in government contracting with less risk. The prime contractor bears the primary risk and responsibility for contract execution, allowing subcontractors to focus on specific tasks without the broader risks associated with prime contracting.

<u>Access to Larger Projects</u>: Small businesses, especially those with limited resources, may find it challenging to compete for large government contracts. Subcontracting provides an opportunity to participate in these larger projects, which might be unattainable as a prime contractor.

While the goal may be to secure prime contracts, starting as a subcontractor can provide a solid foundation for growth in the government contracting arena. It offers a practical way to build experience, credibility, and networks, while reducing administrative burdens and risk. Small businesses should subcontract as a strategic step towards achieving their long-term objectives in government contracting.

Ask Hard Questions During the Acquisition Process
The importance of clarity in the government procurement process cannot be overstated. Government solicitations often come with complexities and ambiguities, akin to looking through a soda straw, making it essential for businesses to seek clarifications on

any aspects that are unclear or inconsistent. This practice is about ensuring a complete and accurate understanding of the government's requirements. **The clarity gained from asking targeted questions will influence the direction and quality of your proposal, ensuring it aligns closely with the government's needs.**

When formulating questions, be direct, specific, and relevant. Avoid broad or generic questions that may result in vague responses. The aim is to get precise information that directly informs the proposal development process. Well-crafted questions can uncover critical details about the project scope, evaluation criteria, and specific requirements that might otherwise be overlooked.

The timing and method of inquiry are also key factors. It's important to understand the channels for submitting questions and to adhere to the specified periods during the solicitation process. Using these opportunities effectively can provide valuable insights and guidance for crafting a compelling proposal.

Asking detailed questions mitigates the risk of basing your proposal on incorrect assumptions. This proactive approach will prevent the significant expenditure of time and resources on a proposal that does not align with the government's needs. In a highly competitive field, understanding and addressing the precise requirements of the solicitation can be a decisive factor in the success of your proposal.

Regularly asking insightful questions can further establish your company's reputation as thorough and detail oriented. This is a valuable aspect of building a long-term relationship with government agencies. Being recognized for diligence and attention to detail

will set your company apart and lead to preferential consideration in future solicitations.

The responses to your questions can provide a competitive edge. They offer insights that will refine your proposal, making it more aligned with the government's expectations and more competitive. These responses can alert you to potentially problematic or overly complex areas of the solicitation, allowing for strategic decision-making about bidding on the project.

Documenting the questions and responses is equally important. Keeping a record of this exchange is useful for the current solicitation but also serves as a valuable reference for future projects. It will also be useful in case of any disputes or misunderstandings that may arise during the contract execution phase.

Finally, engaging with procurement officers is a valuable aspect of the inquiry process. While procurement officers may not provide all the answers, they can often offer useful guidance on the procurement process and insights into what the agency is seeking. Building a rapport with procurement officers can be beneficial for both current and future solicitations. While at Rebellion Defense, we had an opportunity that was stuck in contracting. It was just not a priority for them. By reaching out to the CO acknowledging how busy they were, showing empathy for their workload, and offering to help draft some of the supporting documentation they needed to execute we were able to get them to execute our contract. In addition, I was able to establish a relationship with the CO that allowed us to reach back out when we need support on future projects.

Asking hard questions during the acquisition process is a vital strategy for successfully navigating the complexities of government contracting. It involves a careful balance of strategic inquiry, understanding the procurement process, and effective communication. This approach not only enhances the likelihood of submitting a successful proposal but also establishes your company as a credible and diligent contender in the government contracting arena.

Exchanges

While I recommend avoiding FAR Part 15, Contracting by Negotiation processes for the reasons noted previously, sometimes it is appropriate. While FAR Part 15 acquisitions are more formal, there are still opportunities for exchange with the government. FAR Part 15.201, titled "Exchanges with Industry before Receipt of Proposals," presents an opportunity for businesses to engage. This section of the FAR actively encourages open communication and information exchange between government agencies and interested industry parties. This dialogue is not just limited to CO's but also includes "end-users," ensuring that all stakeholders have a voice.

FAR Part 15.201(a) promotes information exchanges between government entities and potential contractors throughout the procurement process. These exchanges can take various forms, including industry conferences, public meetings, and written inquiries. The purpose is to foster a mutual understanding of the procurement needs and the capabilities of the industry.

The purpose of these exchanges, as stated in FAR Part 15.201(b), is two-fold. First, they aim to enhance the government's understanding of industry capabilities, helping them shape requirements that are realistic and achievable. Second, they provide industry with a better

understanding of the government's needs, enabling them to assess whether and how they can meet these requirements effectively.

FAR Part 15.201(c) encourages early exchanges to address acquisition strategy concerns. This includes clarifications on contract types, terms and conditions, schedules, the feasibility of requirements, proposal instructions, and evaluation criteria. It also provides an opportunity for industry to ask questions about performance requirements, statements of work, data requirements, availability of reference documents, and any other concerns they might have.

If businesses are not fully leveraging these opportunities for early engagement with government agencies, it could be because of a fear of being judged by the government or peers, or simply a lack of awareness that such interactions are encouraged and permissible. The former is a misconception that needs to be overcome, as these exchanges are a fundamental part of a transparent and effective procurement process. The latter, a lack of awareness, should no longer be a barrier, understanding that FAR Part 15.201, Exchanges With Industry Before Receipt of Proposals not only permits, but encourages such interactions.

Identifying Government GWAC Requirements
In the realm of federal contracting, identifying upcoming government requirements is a crucial step for businesses looking to take part in government procurement. While several paid services offer information on upcoming contracts and solicitations, there are also valuable free resources such as SAM.gov. However, there are other resources that are often overlooked. One such resource is detailed in FAR Part 5.6, Publicizing Multi-Agency Use Contracts.

FAR Part 5.6 provides information on a governmentwide database that is freely accessible and offers extensive information on contracts and procurement instruments intended for use by multiple agencies. This database, available at the link provided in the FAR, is a vital tool for businesses seeking to identify potential contracting opportunities. It includes details on a variety of procurement instruments, including governmentwide Acquisition Contracts (GWACs), multi-agency contracts, federal Supply Schedule contracts, and Blanket Purchase Agreements (BPAs) under federal Supply Schedule contracts.

The requirement for posting to this site is that postings should be made within ten days of the award of these procurement instruments. This prompt posting ensures that the database is up-to-date and provides businesses with timely information to identify and prepare for potential opportunities. The database's comprehensiveness and timeliness make it an invaluable resource for businesses looking to engage in federal procurement, especially those seeking to leverage existing contracts for multiple agency use.

Accessing this database allows businesses to acquire insights into the types of contracts that are being awarded, the agencies involved, and the scope of work. This information can be instrumental in strategic planning, allowing businesses to align their capabilities and offerings with the identified requirements. It can also help in identifying potential partners for joint ventures or subcontracting opportunities, as the database provides a view of the companies that are engaged in multi-agency contracts.

Understanding the landscape of multi-agency contracts can inform businesses about the broader trends in federal procurement. It can

provide a sense of which services or products are in high demand across various agencies, enabling companies to tailor their offerings to meet these emerging needs.

The database referenced in FAR Part 5.6 is a valuable, yet often underutilized, resource for businesses seeking to engage in federal procurement. It offers a comprehensive and timely view of multi-agency use contracts and other procurement instruments, providing critical information for businesses looking to identify and capitalize on government contracting opportunities. Leveraging this free resource can be a strategic component of a business's approach to government contracting, complementing other methods of identifying government requirements and enhancing the overall business development strategy in the federal sector.

Exceptions to Competition
In federal procurement, the default expectation is for full and open competition. However, there are specific circumstances outlined in the FAR under which agencies may engage in other than full and open competition. Understanding these exceptions can help when discussing strategic approaches with interested requirement owners:

- FAR Part 6.302-1 - Only One Responsible Source: This exception applies when there is only one source that can responsibly fulfill the agency's requirements. In such cases, no other supplies or services will satisfy the needs of the agency. This is the most commonly used exception, often seen in highly specialized or unique requirements where only one vendor possesses the capability or product.

- <u>FAR Part 6.302-2, Unusual and Compelling Urgency</u>: This circumstance allows for bypassing full and open competition when an agency faces an urgent requirement. The requirement must demand immediate attention and forceful action, and the delay of going through standard competition procedures would significantly impact the agency's ability to meet its mission.

- <u>FAR Part 6.302-3, Industrial Mobilization; Engineering, Developmental, or Research Capability; Expert Services</u>: This exception is invoked when there is the need to maintain a facility, producer, manufacturer, or other supplier.

- <u>FAR Part 6.302-4, International Agreement</u>: When an acquisition is part of an international agreement or treaty, it may be exempt from full and open competition.

- <u>FAR Part 6.302-5, Authorized or Required by Statute</u>: Certain statutes may authorize or require procurement from a specific source, permitting an exception to open competition. Examples of this exception include:

  » Acquisitions made through Federal Prison Industries (UNICOR)

  » Acquisitions made through qualified nonprofit agencies for the blind or other severely disabled

  » Acquisitions made through Government Printing and Binding

> » Acquisitions made through sole source awards under the 8(a) Program

- <u>FAR Part 6.302-6, National Security</u>: This exception applies when open competition would compromise national security.

- <u>FAR Part 6.302-7, Public Interest</u>: In rare cases, it is determined that open competition is not in the public interest. This exception is subject to higher-level approvals.

The FAR requires agencies to announce their intent to sole-source and provide a justification for this decision on the government Point of Entry (GPE), officially found at https://www.sam.gov/. These postings give insight into the agency's procurement strategy and the agency's preference for a specific vendor.

While most acquisitions are not "wired" for a specific vendor, the announcement of an intent to sole source implies that the agency has a preferred vendor in mind. However, if a business believes that the agency's decision to sole-source is flawed or the result of insufficient market research, it can challenge this decision. Businesses undertaking this challenge should know they may face an uphill battle, as the agency has likely already conducted an internal evaluation to arrive at its decision.

The Proposal

A proposal is a platform to showcase your company and articulate a solution that aligns with the customer's vision and needs. The approach to proposal writing should start with strategic planning, focusing on understanding the customer's requirements, and how

your company can meet these needs uniquely. The following principles of proposal writing can increase your chances of success:

Understanding the Customer's Needs: Understanding the customer needs should start before the RFP and in the best case the RFP should be informed by your company. Nevertheless, **the cornerstone of effective proposal writing is a deep comprehension of what the customer needs.** This involves thoroughly analyzing the RFP to discern the core problems the agency is attempting to solve and their overarching goals. It is about empathizing with the customer, seeing the project through their eyes, and understanding the context and motivations behind the RFP.

Highlighting Unique Capabilities: Following the understanding of the customer's needs, the next step is determining how your company's unique capabilities can meet these needs. This process entails identifying specific strengths and differentiators of your company that align with the RFP requirements and developing **win themes**. It is not presenting a broad overview of your company, but rather tailoring your unique strengths and capabilities to address the specific challenges and requirements outlined in the RFP.

Understanding Evaluation Criteria: Another critical component is to understand how the government will evaluate your proposal. Each RFP typically outlines specific criteria against which proposals will be judged. Aligning your proposal with these criteria and ensuring that **every claim or capability you present is substantiated and directly relevant to these criteria is required for a successful proposal**.

Crafting a Compelling Narrative: The strength of a proposal often

lies in its narrative. A compelling proposal weaves a coherent and engaging story that addresses the RFP requirements, demonstrates an understanding of the broader vision and goals of the project, and clearly shows how your proposed solution aligns with this vision. It is about creating a narrative that connects the dots from the client's needs, through your solution, to the proposed costs/ pricing, thus building a convincing case for why your solution is the best choice.

Eliminating Non-Essential Information: In proposal writing, **brevity and relevance are key.** Space is generally limited, so focus on substance over superfluous details. Information that does not directly contribute to addressing the RFP's requirements or enhancing your value proposition should be cut. Clarity and focus are the key ingredients for maintaining the evaluator's attention and effectively communicating your message.

Encouraging Simplified RFPs: The simplification of RFPs can significantly improve the procurement process. Use RFI's and draft RFP Q&A's to provide feedback. RFPs that are direct, clear, and focus on the essential needs and objectives allow vendors to better show their expertise and innovative solutions. Overly detailed and prescriptive specifications can hinder creativity and limit vendors' ability to propose unique and potentially more effective solutions.

Asking Questions and Addressing Flaws: One common oversight in industry is the reluctance to ask substantive questions or to identify potential flaws in the RFP. This hesitation often stems from a fear of offending the government or revealing strategies to competitors. However, asking pertinent questions or raising legitimate concerns can lead to essential clarifications and improvements in the RFP,

ultimately benefiting all parties. **In all my years of contracting I have never witnessed the government hold feedback against a vendor during selection.**

Writing a proposal for a government contract requires a strategic, well-thought-out approach. It is about understanding the client's needs, highlighting your unique capabilities, crafting a compelling narrative, focusing on relevant information, and not hesitating to seek clarifications or raise concerns about the RFP. This approach ensures the development of a proposal that is not only aligned with the government's requirements but also showcases your company's strengths and understanding of the company's goals.

CHAPTER 7:

The Necessary Culture Change in Acquisition

The adoption of agile acquisition methodologies in the federal government is a significant shift from traditional procurement processes, underscoring the crucial role of culture change in this transition. Agile methodologies, known for their flexibility, responsiveness, and focus on incremental progress, present a stark contrast to the historically rigid and linear approaches of government procurement. Successfully integrating agile practices into federal acquisition requires more than procedural adjustments; it requires a fundamental change in organizational culture. This change involves embracing new values and behaviors that align with the agile philosophy. It is about shifting from a compliance-centric outlook to one that prioritizes collaboration, adaptability, and user-centricity. For the federal government, this cultural transformation is a necessity to enhance efficiency, innovation, and the ability to meet rapidly evolving needs in an increasingly complex and dynamic world.

Culture plays a significant role in shaping the effectiveness of public services, and it has the power to drive positive transformation. As we strive for innovation, collaboration, and citizen-centricity, cultivating a culture of continuous improvement becomes paramount. Government agencies have traditionally been perceived

as slow-moving, bureaucratic entities. However, there is a growing recognition that embracing a culture of agility, adaptability, and customer focus can lead to better outcomes for citizens and stakeholders.

Culture change within the government is not an overnight process. It requires persistence, resilience, and a shared commitment. **By championing a culture of innovation, collaboration, and customer focus, we can transform government organizations into agile and responsive entities that effectively address societal challenges and improve the lives of citizens.**

Culture Eats Strategy for Breakfast

These words, attributed to management consultant Peter Drucker, resonate profoundly within the complex terrain of the federal government. My own experiences have vividly illustrated how even the most meticulously crafted strategies, executed by the most committed individuals, can be gradually eroded by the relentless, often imperceptible force of bureaucratic inertia.

Intriguingly, on an individual level, most participants in this system do not perceive themselves as contributors to the problem. And they are not necessarily wrong. Isolated, each policy, each committee, each protocol might indeed serve a purpose, perhaps enhancing efficiency, reducing risks, or ensuring quality. The issue emerges when these elements amalgamate into a bureaucratic cascade, transforming what should be straightforward tasks into protracted endeavors spanning weeks, months, or even years.

This is where culture is felt. If any single person or group could

see themselves as the sole impediment to progress, they would likely strive to change. However, the prevailing culture in federal IT often obscures this perspective. Being a mere cog in the expansive machinery of government processes offers little motivation for efficiency and fosters an environment where minute, often inconsequential modifications are pursued in the name of perfection. This pursuit tends to be more about avoiding negative scrutiny in the next performance review than about driving organizational success.

We are at a crossroads in government IT procurement and delivery. In a domain where the organization has the autonomy to create their own rules, paradoxically, it is these very rules that render them inept rulers. The private sector has long eclipsed the government in many ways, even in meeting federal missions, such as SpaceX's ability to quickly build and reuse rockets at significantly lowered costs, or Amazon's ability to build and deploy cloud environments. Yet the government clings to their established policies and guidelines as if they were lifelines. Even in dialogues with the most progressive leaders, I often encounter remnants of archaic IT acquisition and implementation approaches that act more like anchors — or worse, nooses — than enablers of progress. This is a manifestation of fear, a fear of the unknown, amplified by those who counsel our leaders or those tasked with minimizing their risk exposure.

Perhaps the most persuasive argument to challenge these entrenched attitudes is ironically grounded in a somewhat pessimistic rationale. Even if this new wave of IT approaches — iterative development, cloud hosting, containerization, adherence to industry security standards — is flawed, embracing them still offers a significant

advantage. If these methods are indeed misguided, we will realize this far more swiftly and at a fraction of the cost compared to traditional procurement processes. This real-time feedback is invaluable, allowing us to pivot and adapt rather than sinking millions into outdated solutions. This approach is a pragmatic pursuit of progress, learning quickly from failures, and adapting with agility.

The Gates of Change are Locked from Within

The path to change begins with small manageable steps that show success. Often, I am tasked with resolving large-scale problems fraught with high stakes. While desperation can indeed be a potent motivator, the ensuing changes are usually chaotic, and the risks are substantial.

Empirical evidence suggests that most IT acquisitions are prone to similar challenges. Therefore, a more logical strategy would be to focus on less risky, smaller-scale projects as testing grounds for new methods. Inevitably, mistakes will happen, but these are valuable learning opportunities to develop processes that ensure success in more critical scenarios.

Culture change is undeniably challenging, yet it is often at a micro-level where you can experiment to identify the correct direction. When something feels right, it often is. The common belief that success requires hard work is misleading. If an endeavor feels overly strenuous, it might reveal a misalignment with natural inclinations. Success comes more naturally when you trust your instincts and meet challenges with adaptive strategies rather than direct opposition. Like in martial arts, where you strike hard surfaces

with softness and soft surfaces with hardness, the right approach is crucial for each unique situation.

Success is not necessarily easy, but it should feel like a natural progression rather than a constant struggle, like carving a tunnel with dynamite versus shaping a canyon with the persistent flow of water.

While consulting with a newly appointed Chief Information Officer (CIO), I asked, "Now that you are in charge, what do you want to change?" The answer: "Everything." While I appreciated the sentiment, I reminded them that if they set out to change everything, they will likely change nothing. Instead, they will spend all of their time fighting battles on the various fronts and will likely run out of energy or time before they accomplish any of their goals. Instead, I offered that they should identify one thing they could realistically change in the first three months. We agreed that what was needed was a way to bring in new vendors with the right skills quickly. From there they could execute the technology changes they wanted more efficiently.

In that meeting, we sketched out a contracting structure for an ordering vehicle that could be awarded quickly using a limited pool of GSA vendors with demonstrated experience delivering digital services. Because we were not including an initial Task Order, evaluations could be conducted in a matter of weeks. Working closely with the acquisition team we were able to achieve the vision. In three months, the agency had an established vehicle with proven digital service companies. Not only did this serve as a launching pad for the technology changes needed, it earned

the leader credibility that they were going to do the things they came there to do.

An Example in Change
At the USDS, project assignments were guided by Presidential priorities, lending a certain gravitas to our work — there's something quite impactful about being on a project by Presidential request. While this gave us an incredible amount of authority, we soon realized the importance of a more humble approach for effective collaboration and buy-in.

Projects typically began with a two-week discovery sprint. An interdisciplinary team, composed of technologists, policy specialists, and procurement experts, would be granted comprehensive access to the program under review, culminating in a detailed report of our findings and recommendations. Interestingly, although our primary focus was on technological issues, we often found that the underlying challenges were rooted in the realms of people, processes, and contracting.

One notable project under the direct authority of Deputy Secretary of Defense Robert Work involved the Defense Travel System (DTS), notorious among defense personnel for its inefficiency. One example of the pain this system caused, and lengths people would go through to avoid using it, involved a military flight unable to land because of bad weather. When instructed to fly to another landing strip, the pilot inquired if they would have to amend their DTS voucher. Told that they would, the pilot instead circled until the weather cleared.

My team recommended piloting a commercial travel solution for

defense travel. Out of the three projects assessed, ours was chosen for implementation, and I was requested by the Deputy Secretary to stay on as a subject matter expert.

The program's challenges were the familiar trio: people, processes, and contracting. The system, while functional as per specifications, lacked usability because of the absence of human centered design (HCD) in its requirements. A significant breakthrough came when we discovered an unused modernization Contract Line Item (CLIN) and existing legislation for an innovation pilot. Leveraging these, we simplified the travel policies for basic continental U.S. travel and instructed the contractor to integrate a commercial travel solution. Despite delays and political challenges, we successfully showed the feasibility of modernization. This success informed a follow-on strategy, using an Other Transaction (OT) consortium for prototyping a broader implementation. Following the competition, the vendor solution was selected, and prototyping began promulgating the commercial capability across those parts of the DoD that do not include the military services, commonly referred to as the 4th estate. Through deeply understanding the current contract, the regulations governing travel, starting small, and close collaboration with stakeholders, we could take on one of the biggest business system challenges facing the Department.

Rethinking Federal Contracts

We start with the assumption that a successful IT acquisition should be timely, within scope, and within budget. Yet, achieving all three simultaneously is an elusive goal in reality. It is tempting to attribute these shortcomings to incompetent management or unscrupulous contractors. However, my comprehensive review of

federal acquisitions paints a different picture. More often than not, dedicated, skilled public servants and talented vendors staff these projects earnestly striving to deliver quality solutions.

Despite these efforts, we frequently miss our targets. Even on rare occasions when these goals are met, the sheer size and complexity of the acquisition process, coupled with the time needed to deliver, are out of step with the fast-evolving landscape of technology, cybersecurity threats, and shifting user requirements. This situation calls for a reevaluation of what constitutes success in federal acquisitions. We need to shift our focus from traditional metrics (i.e., cost schedule, and performance) to what truly matters: delivering high-quality, functional solutions to users promptly. By redefining success, we realign incentives for both government and vendors towards this goal.

A more dynamic and user-centric definition of success would emphasize adaptability, responsiveness to changing needs, and the ability to integrate emerging technologies and security measures. In such a framework, cost becomes a secondary consideration, naturally optimized through increased efficiency. This approach requires a fundamental shift from viewing acquisitions as static, one time procurements to understanding them as fluid, ongoing processes that evolve alongside technological and societal changes.

Ultimately, this paradigm shift in defining success is more than altering benchmarks or metrics. It is fostering **a culture that values agility, innovation, and a relentless focus on user needs**. Such a culture encourages continuous learning, adaptation, and collaboration between the public and private sectors. In this environment, success is measured not just by adherence to initial project

specifications, but by the actual value and impact of the technology on the people it serves. Philosopher Thomas Troward said, "The Law of Flotation was not discovered by studying the sinking of things." The same is true for change. It is of little value to study the way things are, for the purpose of reaching a new state. We must study the way things should be, so that the implementation is designed in harmony with the to-be-state. This does not exclude the change agent from studying the rules, but rather compels them to avoid getting entangled in the rigid interpretations or application of these rules, a subject which will be addressed later. If we focus on how and why things are, for the purposes of change our subconscious will bias our approach by those very limitations we currently perceive.

An Illustration of How to Design for Agile: EVM
To design a contract for agile development it is of little value to study the reasons why waterfall metrics and reporting are such. Instead, you must design the perfect scenario through which to acquire the products or services, and only then apply constraints required in a manner that both meets the intent of the constraint and is consistent with methods applied in the ideal state.

To dive deeper into this topic, let's examine the concept of integrating Earned Value Management (EVM) into agile development. EVM, a traditional project management tool, is often seen as ill-suited to the iterative and dynamic nature of agile development. The push to incorporate EVM into agile projects typically arises not from a fresh assessment of project management needs, but from a desire to adhere to existing frameworks and deliverables that may no longer be relevant or effective.

This issue is tied to FAR requirements for the use of EVM and traditional contractors who have invested millions of dollars into establishing their compliant systems calling for it. The regulations can be avoided by simply utilizing commercial contracts under FAR Part 12, Acquisition of Commercial Products and modular contracting under FAR Part 39, Acquisition of IT. Nevertheless, the debate on its use continues. The push from industry is a matter of legacy investment that helps insulate traditional vendors from new competition.

In traditional project settings, EVM is a valuable tool for measuring project performance and progress, quantifying the value of work accomplished against the planned schedule and budget. However, its structured and predictive nature contrasts with the adaptive, iterative processes central to agile methodologies. Agile development focuses on delivering functional products in short cycles and prioritizing flexibility and responsiveness over rigid planning. The key question that should guide the integration of EVM in agile environments is not how to force-fit EVM into agile, but to understand the underlying objectives EVM was designed to achieve and how these can be met in an agile context. This approach requires a fundamental reevaluation of what project success looks like in an agile framework and how it can be measured.

The conversation should pivot from trying to reimagine how EVM can mold to agile methodologies to assessing how best to evaluate the success of agile programs within the fluid, dynamic context of agile development. This shift requires a departure from entrenched mindsets and processes, inviting a more innovative and nuanced understanding of project management in the evolving landscape of software development.

So can EVM be applied to Agile. Yes, it's technically feasible to implement EVM in an agile program. However, the more pertinent question is whether it's beneficial or necessary to do so. **As Peter Drucker famously said, "There is nothing so useless as doing efficiently that which should not be done at all."**

EVM tracks the performance and progress of a project against a detailed plan and budget. It is used to ensure that a project is on track in terms of both timeline and cost. In agile development, where the focus is on regular deliveries and iterative improvements, EVM has no purpose. Agile methodologies emphasize continuous delivery and value assessment, which makes traditional EVM reporting unnecessary.

I often use the analogy, "I do not need a report to tell me if I enjoyed my lunch. I just ate it, and it was delicious." This encapsulates the essence of agile delivery — it is about the tangible outcome and the satisfaction derived from it. If your agile team is delivering functional increments regularly and the quality of each increment is being effectively evaluated, then additional layers of reporting like EVM do not add value. The key in agile is to assess the direct outcomes and user satisfaction rather than to rely heavily on process-oriented metrics.

That said, in contracts where a cost reimbursement model is used, it is still important to track expenses. However, this tracking should be aligned more with the return on investment (ROI) rather than being strictly tied to a schedule, as would be the case in an Integrated Master Schedule associated with EVM. The focus should be on the value being delivered in each iteration relative to the cost incurred, rather than on detailed schedule adherence.

So while EVM can be adapted for agile projects, its necessity and value should be carefully considered. Agile's nature of continuous delivery and evaluation provides sufficient insight into a contract's health and progress.

If It's Broken, Fix It

Ever since my earliest memories, I have been driven by a relentless urge to fix and improve things. As a kid this manifested in both positive and sometimes negative ways. Whether it was sitting at the kitchen table for hours untangling my mother's knotted jewelry because the end result was so satisfying or sneaking into the bathroom to take a bite out of the bar of soap and telling my parents I liked the taste so they would stop washing my mouth out with it when I used bad language. In case there are any kids reading this, it worked, sort of, they did stop washing my mouth out with soap, but as it turns out my parents were pretty creative too and came up with worse options like moving loads of mulch and stones around the backyard for seemingly no apparent reason.

Not that I think everything is flawed; rather, I believe there is always room for improvement. This intrinsic motivation is why I am so passionate about my work. The government, the acquisition process, and proposals are like a vast ocean of opportunities for improvement. Echoing the words of a wise friend, "There is no bottom."

To some, this endless depth of challenges might seem overwhelming, but to me, it is exhilarating. Seeing endless potential for making things better in every aspect of my work gives me a surge of energy. In the government acquisition space, even the smallest

improvement or open discussion about the problems can be a significant step forward.

The community of government employees and contractors is brimming with dedicated, passionate experts. Their commitment and expertise are truly commendable. It is disheartening when I hear negative stereotypes about these professionals because, for every negative anecdote, there are countless untold stories of remarkable individuals and organizations striving to make a positive impact. The real issue is the culture of fear that stifles innovation and risk-taking. Too many talented people are held back by the fear of making mistakes, hindering their ability to implement what they know could be transformative changes.

Standing on the sidelines is not an option. The stakes are too high to ignore the problem and opportunity for improvement. You must have the courage to act on what you know is broken. Yes, there are diplomatic channels and processes to navigate, but that can't be a deterrent. Most people aim to do good, and even those who do not will often support initiatives that reflect positively on them. **If you can present a tangible, innovative solution that simplifies processes, alleviates pain points, or enhances someone's reputation, you are likely to gain support.** And if not, there is always someone else who will see the value in your ideas. The key is to demonstrate how your initiative aligns with their larger goals.

Creating a solution, even if it does not achieve immediate success, is far more fulfilling than passively wishing for change. To build something impactful, you must understand your users - their needs, desires, and challenges. It requires rigorous testing, retesting, and having a clear vision and hypothesis. This approach will

inevitably lead you to one of two conclusions: you are on the right track, or you are not. Being wrong is not a failure; it is a chance to reassess and decide whether to pivot or proceed. Inaction and complacency are far worse than trying and not succeeding. Life is too short to wait for others to make the first move. **Counting on someone else to step up often leads to frustration and regret.** If you see something is broken, fix it.

The Government Hates Two Things

The government hates two things: the way things are and change. This dichotomy sets the stage for an inherently stressful environment. Change, while often necessary and beneficial, tends to be met with resistance, creating a tension that can be debilitating or motivating. Stress, in this context, becomes a critical element, acting much like a double-edged sword. It can either erode one's resilience and effectiveness, akin to how rust gradually weakens even the strongest metals, or it can forge strength and resilience, reminiscent of the transformative power of a blacksmith's fire and hammer. The key difference lies in how one handles this stress - whether it's managed effectively or allowed to become overwhelming.

Effectively navigating stress in such an environment demands a holistic approach, encompassing not just work, but also personal life and hobbies - these are interconnected but distinct aspects of one's overall well-being. My approach is through the consistent practice of martial arts and time with my family. For martial arts, I make time to train every week and attend at least one seminar a year. Besides being great for your health and personal safety, I love doing something that requires my full attention, **if I am thinking about anything else I will literally get punched in the face**. For

time with the family, beyond the daily activities we go camping regularly and take at least two longer vacations annually.

In the workplace, particularly within the government, it's crucial to set realistic, short-term goals that are both achievable and measurable. Celebrating small victories is vital, no matter how trivial they may seem. These accomplishments help reframe stress as a catalyst for growth and development, rather than a hindrance. Beyond these smaller goals, it's also essential to identify and pursue more significant, overarching objectives. These "major muscle movements" provide a sense of direction and purpose, organizing the smaller achievements into a coherent trajectory. **They serve as milestones that, upon reflection, reveal a clear path cut through the bureaucratic underbrush, leading towards meaningful progress and innovation.**

Managing stress in such a challenging environment requires recognizing and embracing its dual nature. On the one hand, stress can be a warning sign, indicating when to step back, recalibrate, and seek support. On the other hand, it can be a driving force, pushing one to confront and overcome obstacles, innovate, and effectuate meaningful change. This requires a mindset that views stress not as an enemy, but as an inevitable, even useful, aspect of professional life - especially in a field as dynamic and impactful as government work.

Handling stress in the federal government, or in any high-stakes, dynamic environment, involves a delicate balance. It requires setting and celebrating small goals, aiming for larger objectives, and maintaining a healthy balance between work, life, and personal interests. Most importantly, it involves a mental shift to view stress

as an opportunity for growth and a tool for positive transformation. This perspective not only mitigates the potentially corrosive effects of stress but also harnesses its power to forge a stronger, more resilient, and effective professional self.

Looking Back to Go Forward

There is no single solution, change is as much about intellectual intelligence as it is emotional intelligence. It is through the principles of innovation, which one can experiment, learn, and grow through the creation of momentum and the selfless reward of those who will step outside of their comfort zone to support it. But it is hard to see change in the moment it is occurring.

About ten years ago, I decided I wanted to learn how to play the guitar. I am the type of person who, when I decide I want to do something, I go all in. So I researched guitars and within a week bought a Fender CD-60. I remember the smell of the guitar and the feel of it the first time I picked it up; I was elated. However, elation was quickly replaced with frustration. This beautiful instrument in my hands was just that, beautiful. The sound coming out of it was anything but. Nevertheless, I was determined. I set aside time every day to practice and watched hours of YouTube lessons. Pretty soon I could play common riffs and some basic scales. I was ready to tackle songs, or so I thought. Nothing sounded right. My rhythm was off, switching chords seemed impossible, my fingertips were raw, and it was anything but fun. I was ready to hang it up, accepting that I was not "born to play guitar" when I heard my son through the door singing along. When I stopped he said, "Wow, Dad, you are getting good."

It was at that moment that I looked back and realized I was not just banging fuzzy chords or running through basic scales; I was playing music (albeit at probably a 3rd-grade level). I was so focused on the difficulty of the new challenge I undertook; I had not given myself credit for the challenges I had already overcome. Now I still would not call myself a guitarist, and I will not play in front of other people, but it has become my sanctuary, where I can clear my mind and relax, learn new things, and appreciate the steps toward the top of the mountain. It is a constant reminder that life is about the journey, not the destination.

I have been involved in culture change and agile adoption in the government for two decades. In every engagement, whether I was a government employee or coaching an agency, I hear the same thing, "It is so hard, I don't think we will ever get there."

When I hear that, I am reminded of my own struggles, both in driving agile adoption and learning a new skill. It always feels like you are stuck in the mud and that you are wasting your energy. It feels like it would be easier to quit or stick with the status quo. Change in the government is especially difficult. Decades of bureaucracy and risk aversion are systemic. Fear of the unknown and failure are incredibly high, such that almost everyone in the government is empowered to say no, but only a very few are empowered to say "yes." But agile adoption has come an incredibly long way. When I first started experimenting with acquisition models to acquire agile services, I was told it could not be done. When I spoke on the subject at conferences, I was looked at with suspicion and doubt. Now it is almost universally accepted as not only possible but the right thing to do. Even the Government Accountability Office (GAO) has written multiple reports on the benefits and the Hill

continues to pass legislation to push agencies toward modernizing software acquisition, development, and delivery.

So, is it easy? Absolutely not. It is every bit as difficult as it ever was. In every agency engagement, I see the same frustration I felt when I was doing it myself. However, I also see pockets of innovation appearing all over the government. I see entire organizations established to drive agile adoption, and I see it working. When I hear, "It is so hard, I don't think we will ever get there," I ask the person to tell me where they were on this journey a year ago, six months ago, and what happened this week. Invariably, I learn that they have come incredibly far, that there are now policies in place that support them. They have awarded at least a version of agile contracts, and that leadership is supporting them to do more. That is a major accomplishment, and it deserves to be celebrated. Implementing agile at an agency is much like agile development itself. It will never be done. There is no such thing as perfect. Success is delivering, learning, and improving!

Change Management

Even with all the tools, expertise, and political will, change is hard. Perhaps it is not human nature to change, or perhaps it is the diversity of incentives that drives each individual's behavior that makes changing a collective so difficult. In my journey, I have been privileged to have senior decision-makers across government seek my insights on fostering change. While there is no silver bullet, there are some behaviors that have proven more effective than others.

In this section, I will shed light on those practices, hoping others will find value in their own endeavors. Since procurement is at

the heart of my experience, the examples will focus on that area of bureaucracy. However, I would contend that these lessons apply far more broadly to bureaucracy change writ large.

- Start Small

- Maintain Alliances

- Take none of the credit but all the blame

Starting Small
Not that small endeavors are easier than large ones, often it can be as difficult if not more so. Small projects are sometimes more difficult to fund (a classic government paradox). Small projects also often lack senior or even mid-level awareness. This can be both a good and bad thing. It is hard to get people to move without a certain level of leadership expectation. However, this decreased attention from leadership sometimes allows for more freedom, which is often necessary for implementing out-of-cycle activities or waiving standard operating procedures.

Also, small projects decrease the "Washington Post" risk (i.e., the risk of your failure ending up on the front page of the newspaper). It is precisely this obscurity, which makes small projects ideal for creating the initial spark from which a big bang may occur. In these small efforts, you can experiment and establish precedents of success or learn from failure without the fanfare that a flagship program might draw. These are not irrelevant projects for which there is no value. They are simply ones that would likely have gone unnoticed had nothing out of the ordinary occurred. This is where the reward equation tips in favor of the change agent.

A small failure can likely be recovered quickly and realigned. A small success, however, can serve as a case study for future implementation with slightly larger stakes. **Change is a marathon, not a sprint!** It is often the largest acquisitions that get the attention and demand change. Yet there are thousands of small procurements that consume more resources than they provide. Implementation of streamlined acquisitions commensurate with the risk makes sense. If it did nothing more than free resources to focus on the more complicated large acquisitions, thus reducing bottlenecks, that might be enough. However, it does far more. **It demonstrates that the monsters in our closets are nothing more than the figment of our imagination; a set of rules created in response to a single lapse in judgment rather than empirical evidence.** Small wins scrape calcification away, increasing mobility for larger movements. OTA, typically used for small prototype efforts, is an example of this. It allows for the process to be reimagined and has shown the value of down-selections, challenges, and increased collaboration with industry throughout the process. It is already clear, where mistakes have been made, that the same calcification can grow, however, it has also proven that these practices can be adapted to other purchases as we are seeing with the adoption of CSOs under federal supply schedule acquisition.

Maintain Alliances
When implementing change, it is common to make those whose job it is to maintain order and structure, or "bureaucracy" agitated. It is often their very role to minimize risk through the execution of procedures that, over time, have proven to provide at least a tolerable level of risk management. It is a case of the devil you know, versus the one you don't.

There are two approaches to this resistance. **There is force and there is flow.** In the force model, presuming some level of endorsement, the change is driven over (or perhaps through) the resistance by relying on top cover, empowerment, and sheer confidence. While this often works and is sometimes necessary, it is imperative to remember that every action has an equal and opposite reaction. While it is highly likely that the desired change will occur, it will undoubtedly result in increased antibodies to future change and resentment from the very individuals who will be charged with maintaining or supporting the change in the future. The battle may be won, but at what cost?

This was the lesson we learned in the early days of USDS regarding Presidential directives. We had the authority to create them, but when used recklessly it did more harm than good. Alternatively, **the flow model** suggests that resistance is rarely best met with equal or greater resistance. When attaining flow, energy is used; if redirected, such that momentum is created without expending more energy. One plus one equals three.

Understanding concerns and providing risk mitigations that offer greater reward than the perceived risk, while aligning outcomes with stated needs, is often far more effective in obtaining buy-in from key stakeholders and decision-makers. This can only be accomplished through a thorough understanding of their perspectives, concerns, needs, and an established understanding of the framework within which you hope to create change. Force may cause the same outcome but will create scar tissue. Flow may take incrementally longer but will often result in muscle memory, which will support future activities. Fast is not fast; smooth is fast.

Changing the way you buy and ultimately how what you buy is delivered has impacts on external organizations. Security and Configuration organizations, for example, may have very different priorities, and forcing them into a model which does not align with theirs is rarely effective in the long term. Using healthy UCD practices, understanding their needs, and establishing an approach that allows them to be effective and confident will increase the likelihood of success. Understanding they are the expert in their respective fields is essential, as they are often the most capable of helping navigate the terrain.

Take none of the credit, but all the blame
Change has risks. It is likely you will fail, starting small and getting buy-in decrease the impact of failing, but failing is part of learning. It is essential that it is clearly stated upfront and honestly upheld post-execution, that you "take none of the credit but all the blame. **There is no glory for the change agent**. It is the satisfaction of change that drives them and the courage to face the potential flashback of failure which sets them apart. Ensuring stakeholders that the risk is yours and yours alone, that you will take the blame and stay around to clean up the mess while ensuring that success is theirs, is not only right but necessary.

Change is a matter of creating instability for growth. However, that instability is often not something that most stakeholders are requesting or overtly willing to accept. It is only through selfless commitment that one can acquire the trust and support of those who are most affected and who are required for enduring success.

With regards to acquisitions, the measures of success are difficult. Reaching an award before an often arbitrary timeline, without a

successful protest, and resulting in a capable contractor (something often not known until later) are the typical metrics. This makes it difficult to promise change that can be measured through an objective lens. The lack of objective metrics makes it far more difficult to get buy-in. Regardless, when wins occur, they are clear and very real. Awarding a new contract in less time than the existing schedule would release the requirement or getting the first deliverables in less time than the previously expected award are clear wins. Allowing those that went along with the change, ownership of these wins is important to build trust, therefore, ensuring future support; future support is what it is all about.

Everyone Is Saying The Right Things

Agile contracting and iterative software development are naturally associated concepts. As such, the cultural barriers are associated as well. The shift towards iterative software development in government is becoming more broadly discussed and, in many corners, accepted. Yet the full realization of this transition remains elusive. Recent National Defense Authorization Acts (NDAAs) dating back to 2016, along with OMB memos and GAO reports, demonstrate a legislative and administrative push for this change. Agency leaders and customers are calling for it, yet the question lingers: why has this transformation not taken hold?

A key challenge is the deep-rooted nature of traditional procurement and project management practices. To truly embrace agile methodologies, there needs to be a fundamental shift in how projects are conceptualized and executed. This means moving away from a focus on lengthy, detailed reports promising delivery over years, to a more dynamic approach where the emphasis is on a

repeatable process that delivers functional products in shorter cycles, typically weeks or months. Budgeting practices also need to adapt, aligning with the iterative phases of agile development rather than the conventional multi-year execution cycles.

The role of stakeholders, such as end users, senior leaders, lawyers, and security professionals are critical in this transition. There is a need for a unified front to resist the pitfalls of partial or superficial implementation of modern software acquisition practices. Stakeholders must actively challenge language and practices that are antithetical to agile principles, ensuring that every step taken is genuinely conducive to agile implementation.

This cultural change is not limited to government entities alone; it extends to the entire industrial base. Initially, many traditional contractors resisted this change. They were built to mirror the government and have done quite well. Recently, as momentum has developed, there has been a shift. Now large traditional government contractors are acquiring smaller agile development companies. This strategy has garnered mixed reactions, but I view it as a positive step. It allows established firms to integrate essential agile expertise, maintaining their competitive edge, while also rewarding the entrepreneurs behind these innovative agile companies. Maintaining a diverse contractor base is crucial. Big businesses are a staple in government contracting, but their pivot towards agile methodologies has a long road ahead. This trend, however, demonstrates a recognition of the need for change and a willingness to invest in the expertise to facilitate this shift.

Large firms incorporating agile expertise in-house is a significant stride towards a broader cultural transformation. This change is

a complex process requiring adjustments in planning, budgeting, stakeholder engagement, and a fundamental shift in mindset. The transition to agile is a journey that demands ongoing commitment and effort from all parties involved to ensure its successful and complete adoption.

This cultural evolution is critical for the government to stay abreast of technological advancements and changing societal needs. By fostering a culture that is receptive to agile principles, the federal government can significantly enhance its procurement efficiency, adaptability, and ultimately, its service to the public. The successful implementation of agile acquisition, therefore, requires all stakeholders to do more than embrace the concepts. They must take actionable steps to implement them.

Victor Hugo tells us, "Nothing is as powerful as an idea whose time has come," which resonates deeply with me. Recently, I have observed a self-sustaining momentum in this change, shifting the focus from advocating for reform to demonstrating successful principles. Now, the question is not whether we should embrace changes like small-scale purchasing and prioritizing product over paperwork; it is about identifying where and by whom these practices have been successfully implemented.

This task of gathering and publicizing the best examples of successful change is a collective responsibility for all those committed to this transition. It is a journey of not only showcasing successes but also learning from the paths tread by those who dared to venture into new territories of acquisition and organizational culture.

Culture Change Characteristics

- <u>Leadership Commitment</u>: Culture change starts at the top. Leaders must show a genuine commitment to fostering a culture of innovation and change. They should set the vision, communicate the importance of cultural transformation, and lead by example.

- <u>Empowering Employees</u>: Engaged and empowered employees are the driving force behind cultural change. Encouraging and supporting their ideas, providing opportunities for professional growth, and fostering a sense of ownership can ignite a positive shift in the government's culture.

- <u>Collaborative Networks</u>: Breaking down silos and promoting both inter and cross-agency collaboration is crucial. Creating platforms for sharing best practices, facilitating knowledge exchange, and promoting collaboration can enhance problem-solving, innovation, and the delivery of citizen-centric services.

- <u>Openness to Experimentation</u>: Cultivating a culture that embraces experimentation and learning from failures is essential. Encourage employees to take calculated risks, experiment with novel approaches, and learn from the outcomes. This mindset fosters innovation, adaptability, and continuous improvement.

- <u>User Engagement</u>: Placing users at the center of decision-making processes and actively involving them in shaping policies and services is vital. Soliciting feedback, conducting user research, and leveraging user insights can drive customer-centricity and ensure that government services meet the needs of the people they serve.

Leadership in Agile Acquisition

The successful adoption of agile acquisition methodologies within any organization, particularly in the realm of government procurement, hinges significantly on the presence of effective leadership. This shift demands a leadership style that is visionary, adaptive, and supportive. Effective leaders play a pivotal role in steering their organizations through this transition, championing the principles of agility, and fostering an environment conducive to change. Leadership in agile acquisition is about driving a transformative movement that redefines the organization's approach to procurement and project execution.

Leadership and Agile

Changing long-standing purchasing habits and the ways needs are articulated cannot happen without effective leadership. Several years ago, I had the opportunity to discuss this with Michael "Mike" Rodrigue during a private fishing trip on the Chesapeake. Mike was one of the most impactful leaders I have worked with. Before becoming the Deputy Director of NGA, he was the Senior Program Manager for NGA's Base Realignment and Closure (BRAC), consolidating data centers around the world to the new campus in Virginia. I had the privilege of supporting Mike as his CO in this effort, as I oversaw all existing infrastructure contracts and ultimately the new virtualized cloud environment. This was a

monumental task. Beyond the sheer volume of systems and contracts affected, this was one of the first virtualized cloud environments in the federal government. Legacy applications had to be modernized to operate in the cloud and so almost every employee and contract at the agency was impacted.

Amid the calm of the bay, I asked him how he was able to mobilize the entire agency around a single vision; what was the key to his successful leadership. His reply was simple and profound: **"capture their hearts and minds."** This advice impacted the way I thought about my approach with regards to driving adoption of agile acquisitions. Acquisition professionals, accustomed to traditional methods, often meet new approaches like agile with skepticism or see them as passing trends. Overcoming this requires more than directives; it involves winning their trust and changing their perspectives.

To capture hearts and minds, you must lead by example. Introducing concepts like fixed price iterations (i.e., pricing each iteration as a completion deliverable within a fixed price contract) was initially met with resistance, but now, with many successful federal examples, it's easier to show their effectiveness. We must strive to broaden perspectives, to see beyond individual acquisitions and understand our interconnectedness as a community. Our decisions and practices influence each other, from setting precedents to creating shared experiences.

Leaders need to address the apprehension of standing out or fear of reprisal. This shift can not be met with mere lip-service. Instead, professionals must be provided tools, templates, and success stories that can empower them to challenge the status quo. It requires

encouraging responsible risk-taking and recognizing a team or individual's efforts when they step out of their comfort zones. As the saying goes, "a wise person has failed more times than the fool has tried." There is no one-size-fits-all solution to the challenges in acquisitions, but fostering an environment where creativity and experimentation are supported is key to continuous improvement.

Teaching, guiding, supporting, and appreciating the people who are shaping the future of acquisitions is the cornerstone of transformative leadership in this field. It is about enabling teams to apply their expertise creatively to evolving challenges and acknowledging their contributions, truly capturing their hearts and minds in the pursuit of agile and effective acquisition practices.

Embracing Bold Perspectives

In my third year as an intern at NGA, I was chosen as the Intern President, a role that came with several responsibilities, including the daunting task of planning and hosting the annual Contracting All-Hands. This event was significant, demanding meticulous planning within a tight budget, from securing the venue to setting the agenda and selecting speakers. I saw this as a crucial opportunity to not only show my capabilities but also to create a valuable and informative experience.

My ambition led me to reach out to Vern Edwards, a figure I revered as the pinnacle of contracting expertise. Having been profoundly influenced by Vern's training sessions and his insights on the WIF-CON discussion board, I aspired to emulate his deep understanding of contracting. To my delight, Vern agreed to present at the event and declined any form of payment, with just one stipulation: he

would not provide "read-ahead" content beforehand, a seemingly reasonable ask at the time.

The event unfolded smoothly, with me at the helm as the MC. The atmosphere was charged with anticipation for Vern's presentation. When Vern came on stage, he spoke passionately about treating contracting not just as a job, but as a profession, equating it with the high standards of doctors or lawyers. His emphasis on mastering the craft and being a knowledgeable business advisor resonated deeply with me. He closed his presentation with a final but powerful statement, **"if you do not feel like a professional, it is a failure of your leaders."** The audience was left in stunned silence. After the event, I faced a barrage of criticism from various managers who found Vern's speech inappropriate. Their reaction caught me off guard, as it sharply differed from how I interpreted his message.

Later I received a request to meet with my Senior Procurement Executive (SPE), Sharon Parish. I braced myself for the worst. When asked about my thoughts on the event, I candidly expressed my admiration for Vern's message, asserting that any offense taken by the leadership team reflected more on them than on Vern. Expecting repercussions for my boldness, I was surprised and relieved when Sharon not only agreed with my viewpoint but also praised the event. She saw potential in me, offered to mentor me, and encouraged me to continue organizing such events. Sharon's mentorship became a cornerstone in my professional development for years to come, for which I remain profoundly grateful.

Attitude not Aptitude
Sharon Parish passed away on February 9, 2011. Her favorite quote, "It is your attitude, not your aptitude, that determines your

altitude" by Zig Ziglar, was aptly included in her funeral service. This quote encapsulates the philosophy that guided her approach to mentorship and leadership. Sharon's early and sustained interest in my career development was a testament to her belief in this principle. Despite my initial lack of understanding, my curiosity and determination resonated with her. Her impact on my career trajectory was profound and lasting. She consistently encouraged me to challenge norms, to approach situations with boldness, and provided me with complex challenges accompanied by unwavering support and advice.

It was Sharon who recommended that I pursue an MBA in government Procurement at Strayer University. She foresaw that, as a rapidly rising professional lacking years of experience, an advanced degree would help me overcome potential career obstacles. She also suggested that I write my thesis on FAR Part 37.6, Performance Based Acquisitions (PBA), a decision that would unknowingly lay the groundwork for my later work in agile contracting. Her foresight and guidance helped to shape my career path.

Sharon's passing left a significant void, yet her legacy continues to inspire and guide many. The Sharon Parish "People First" award, established in her honor, is annually bestowed to leaders who emulate her exceptional qualities. While she was physically small in stature, the impact she left on procurement and in the lives of those she mentored is monumental. Her memory and the lessons she imparted remain a cherished and guiding force in my career and life.

Who is Advising You?

In the landscape of organizational leadership, the value of having the expert in the room cannot be overstated. For far too long, major technical decisions have been made without a technologist in the room and acquisition strategies determined without a CO. In some cases, there just isn't the in-house expertise available. In those cases, decision makers are wise to seek outside expertise. The blend of advanced skills and objective perspectives is crucial, especially in an environment where senior positions often equate to greater detachment from the realities of front-line operations, innovative thinking, and uncomfortable truths. This detachment underscores the indispensable role of expert advisors. They are not merely assets during routine operations; their true value lies in navigating extraordinary situations. These experts serve as buffers against unpreparedness and are pivotal in facing challenging truths, akin to insurance in times of uncertainty. A common issue in many organizations is the resistance to change from middle management, often under the banner of risk avoidance. Encouraging leaders at all levels to take calculated risks is essential. This entails not just accepting risk-taking but celebrating it when it leads to success and viewing failures as learning experiences rather than reasons for punitive action.

The principle that greater risks can lead to greater rewards, a well-known concept in the investment world, equally applies in organizational leadership. For an organization to experience significant growth and innovation, its leaders must be prepared to invest in new ideas and methods, acknowledging and accepting the inherent risks. However, this is often hindered by the short tenure of

senior leaders and the long-term, risk-averse mindset of middle management, who may be more focused on their career arc. This tendency is often fueled by the observation and memory of the consequences of past mistakes, fostering a risk-averse culture.

To address this, leaders must surround themselves with forward thinking change agents who push them to realign incentives in a way that makes **the risk of maintaining the status quo more intimidating than the risk of failure**. Leaders must create and nurture a culture where change and innovation are not just welcomed but regarded as essential components of organizational progress.

Fostering meaningful change and innovation in any organization involves tapping into the expertise of advisors and change agents that ensure the nurturing of a culture that prizes prudent risk-taking, and developing an incentive structure that encourages bold yet thoughtful decisions. Embracing these aspects is critical for leaders aiming to create an environment that is receptive to growth and innovation and thrives on it. This approach is central to transforming an organization into a dynamic, forward-thinking entity capable of adapting and excelling in an ever-evolving landscape.

The Pencil Theory

On a visit to Quantico, I encountered a leadership concept known as the "pencil theory," a simple yet profound metaphor that encapsulates a crucial lesson about leadership and growth. Consider the humble pencil: an everyday object, approximately 7.5 inches, equipped with a small eraser about 0.2 inches long. This design is intentional and symbolic. The eraser, though small, acknowledges

an essential truth; mistakes are an expected, even necessary, part of any process, including leadership.

Each time you use the eraser to correct a mistake, it becomes incrementally smaller. This diminishing size of the eraser serves as a poignant reminder: while errors are natural, our capacity to amend them is not infinite. With each mistake corrected, the opportunity to rectify future errors diminishes slightly. Eventually, the eraser wears away completely, leaving behind just the pencil. This stage represents a critical juncture in leadership - the point where rectifying mistakes can lead to more significant damage, akin to tearing the paper.

The metaphor extends further. The pencil, despite losing its eraser, keeps the ability to be sharpened. This represents the continuous opportunities for personal and professional development, the relentless honing of skills and acquisition of knowledge. As the eraser diminishes, the expectation is that the frequency and gravity of mistakes will lessen. This evolution reflects the natural trajectory of growth and learning in leadership. The initial phases are marked by more frequent errors and learning opportunities, gradually giving way to refined judgment and decision-making.

The pencil theory subtly underscores the importance of foresight and measured actions. As leaders, the recognition that our "eraser" - our ability to rectify mistakes - is limited, encourages a more thoughtful and considered approach to decision-making. It invites leaders to weigh their actions and words carefully, understanding that each choice shapes the narrative and impact of their leadership.

The lesson of the pencil theory lies in understanding that the true

value of a leader, much like the pencil, is not in the outer shell or the ability to erase mistakes, but in what lies within. The graphite core of the pencil, its ability to leave a mark, to create and communicate is its true essence. Similarly, the core of a leader is their vision, values, integrity, and the impact they have on others. It is these inner qualities that define a leader's legacy, far beyond the transient ability to correct errors.

The pencil theory is a powerful metaphor for leadership. It teaches us about the inevitability of mistakes, the finite nature of correcting them, the continuous journey of self-improvement, and the intrinsic value of a leader's inner qualities. It is a reminder that effective leadership is not just about how we handle our mistakes but about how we harness our core strengths to leave a lasting, positive impact.

The role of leadership in the adoption of agile acquisition is indispensable and multifaceted. Leaders must not only embrace the agile philosophy themselves but also inspire and enable their teams to do the same. They are the catalysts for cultural and procedural change, guiding their organizations through the nuances of agile methodologies. By demonstrating commitment, fostering open communication, and encouraging a culture of continuous improvement, leaders can effectively navigate the challenges associated with transitioning to agile acquisition. Ultimately, effective leadership is the cornerstone of a successful agile transformation, ensuring that the organization not only adopts agile practices but also reaps the full benefits of agility in responsiveness, efficiency, and improved outcomes.

Concluding Thoughts

A thorough comprehension of the fundamental principles of government contracting is indispensable for navigating and influencing the complex realm of public procurement. This knowledge serves as a critical foundation for all stakeholders involved in government contracting, empowering them to operate within the established framework effectively, ethically, and with a clear understanding of their roles and responsibilities. As the landscape of government procurement continues to evolve with technological advancements and changing societal needs, this foundational knowledge becomes a key asset. It enables stakeholders to adapt to changes, advocate for improvements, and contribute to the development of more efficient, transparent, and fair procurement practices.

As you turn the final pages of this book, envision yourself not just as a reader, but as a catalyst for groundbreaking change in the world of federal contracting. This book has equipped you with an understanding of culture change, leadership, innovation, and the complexities of federal contracting. Now, you stand on the precipice of a new era, ready to lead and inspire those around you.

Imagine yourself as the architect of a more agile, responsive, and effective federal acquisition system. You have the knowledge to challenge the status quo, to replace rigid and outdated practices with agile methodologies that are in sync with the rapid technological advancements of our age. Your role transcends that of a participant; you are a visionary, leading your team and organization through a transformative process with confidence and expertise.

Envision the impact you can make as you apply these insights to real-world challenges, breaking down barriers and forging new paths. Your approach to problem-solving is now imbued with creativity and a forward-thinking mindset, making you an invaluable asset in the realm of federal contracting.

As you close this book, remember that your journey of innovation and leadership is just beginning. The pages you've read are principles for a career marked by influential changes, pioneering solutions, and a leadership style that sets a new standard in the industry.

Embrace your newfound role as a leader and innovator. You have the power to drive meaningful change, to influence policies, and to shape the future of federal acquisitions. Your journey has prepared you to be a beacon of progress, transforming not only your career but also the very fabric of federal contracting. The path ahead is yours to forge, filled with opportunities to leave an indelible mark on the world of government procurement. Take this step with confidence and lead the way toward a future where federal contracting is synonymous with efficiency, adaptability, and transformative progress.

Epilogue

Reflections on a Career in Government Acquisition

- Unlike most government agencies that follow the General Schedule (GS) grade system from 1-15, NGA used a pay band system, ranging from bands 1-5. I started off as a pay band 2, which is roughly equivalent to a GS-7. It's common for people to spend their entire careers climbing this ladder, often viewing a GS-14 or Band 4 position as a pinnacle of success. Initially as a jest, I set for myself what I later embraced as a personal vision: my "5 in 5" plan. This meant reaching pay band five within five years. Despite being met with laughter, such rapid advancement was deemed impossible, I achieved it. Reflecting on this admittedly bold journey, several key principles stand out:

- **Be a Nerd:** Mastery of your field is crucial. I immersed myself in learning everything I could about my profession, believing that expertise is the foundation of success.

- **Be Curious:** I was always inquisitive, asking questions and conducting research to deepen my understanding and find innovative solutions to complex problems.

- **Be Bold:** Despite being junior, and typically expected to be a silent observer, I consistently took a proactive role. I would sit at the table during discussions, actively

participating and contributing with critical thinking. I operated on the premise that if my presence was unwelcome, it would be made clear, but it rarely was. It turns out that few people enjoy conflict, and many assume that if you are there, you belong there.

- **Take on Broken Projects:** I had a penchant for tackling failing projects. With such projects, the only way you could go was up. If you make even the smallest improvement, it is noticed and appreciated; turn a project around, and you are a hero. This led to my reputation as "the fixer". Sharon Parish, my first Senior Procurement Executive (SPE) often assigned me to the most challenging programs which I gladly accepted with one condition; I would do things my way, free from interference unless absolutely necessary.

- **Be Accountable and Generous:** I followed a simple rule: in success, share the credit widely; in failure, take full responsibility. This approach helped me build a network of collaborators eager to tackle tough challenges with me.

My "5 in 5" journey at NGA was not just about rapid career advancement. It was a testament to the power of ambition, continuous learning, boldness, problem-solving, and collaborative success. These principles not only fueled my professional growth but also allowed me to contribute meaningfully to the organization.

Despite my achievements in advancing my career, I encountered a fundamental issue with the traditional career trajectory mindset. This mindset often involves a well-defined plan, complete

with specific objectives, one of which is usually to avoid failure at all costs. When the primary goal is career advancement, any potential obstacle or setback, anything that could hinder or even derail a promotion opportunity, is viewed as an unacceptable risk. This mentality can lead to a preference for the "safe" path, which, while secure, seldom leads to significant impact or change. The saying "nobody got fired for hiring IBM" aptly reflects this cautious approach. While I made a point of making bold and innovative choices, the more typical narrative in many organizations is to adhere to the status quo and avoid any actions that might rock the boat.

This fallacy became explicitly clear when I joined the US Digital Service (USDS). At USDS, the conventional career arc was non-existent. Everyone worked under term agreements with no possibility of promotions. This structure meant that each person had a limited time to make a real difference, without the usual concerns about how their actions might affect their career progression. The outcome was remarkable. Freed from the constraints of traditional career advancement concerns, people at USDS were highly motivated to make daring decisions and tackle some of the most challenging issues. There was enthusiasm to address problems that were often considered too risky or complex to address elsewhere. This experience highlighted the immense value of stepping outside the conventional career arc and the extraordinary results that can be achieved when the focus shifts from personal career advancement to making a meaningful, tangible impact.

Be a Giraffe

Shortly after joining NGA, the entire contracting department

took part in a personality assessment. This was an exercise where, after answering a series of questions, we were grouped based on our results, each group symbolized by a different animal. I found myself in the "giraffe" group. The assessment defined a giraffe as someone who was willing to stick their neck out and look around the landscape, to see how things look and to see how things might be better.

As we gathered in our respective groups, something unexpected occurred. Out of around 150 contracting professionals in the room, I was the only giraffe. This was amusing, but it was also the first indication that my approach to the contracting profession might differ from my colleagues.

Being the only giraffe among my peers suggested I might see things from a different perspective in my professional journey. It was an early sign that my approach and thinking in the contracting field could be unique, setting me apart in subtle, but significant, ways. This moment stayed with me, hinting at a career path where my individuality would play a key role in how I navigated the profession. But I was left with a question: would this rigid culture accept my unique brand of contracting?

Thinking differently is a good thing. While evolution has created an intrinsic drive to fit in, there is tremendous value in being different. Seeing problems from a different perspective or seeing problems when nobody else does is a virtue in any organization. Seeing the problems and then fixing them that is. More than a virtue to the organization it is what turns a job into a profession, it is where the fun lives at work. Rather than trying to keep your head down or fit in, have the courage to be a giraffe.

The Business Advisor

Earlier, I reflected on the start of my journey in government contracting as an intern at NGA, where my initial enthusiasm was soon overshadowed by frustration. The simplicity of the tasks and the inefficiency of the tools at hand, particularly the contract writing system, turned the job into a tedious experience. The system was slow, unintuitive, and prone to errors, leading to a routine reliance on white-out and a typewriter for making corrections. This marked my first encounter with the challenges of inadequate technology in the workplace, setting the stage for my journey in the contracting field.

After spending nine months in a role primarily focused on purchasing laptops and printers, I found myself at a career crossroads. The monotony of the work, the lack of creative challenges, and the repetitive nature of processing countless orders led me to question my fit in the contracting field. I did not feel like my efforts were making a meaningful difference. With these thoughts, I approached my manager to express my concerns. I was grateful for the opportunity but felt that this path might not be the right one for me. She listened empathetically, acknowledged my contributions, and expressed regret at the thought of losing a competent member of the team. She offered an alternative. Before I made a final decision, she suggested a potential pivot within the field; a move to the Research & Development (R&D) division. The prospect of diving into a more complex and intriguing area of contracting piqued my interest. Intrigued by the possibilities this new avenue could offer and considering I didn't have another job offer, I embraced the opportunity to explore what R&D had in store.

Upon transitioning to the R&D division, I was immediately struck by the complexity of the requirements and the vast array of contracting options at my disposal, including OTA, SBIR, and BAAs. However, with this increased complexity and flexibility, I soon realized the contracts were in disarray. Confronted with requirements I barely understood, such as "ontologies," a term completely foreign to me, I felt out of my depth.

To bridge this gap in understanding, I took a proactive step. Our office was conveniently near the scientists we supported, so I began visiting their workspace to ask questions. These interactions were enlightening. I discovered the infectious enthusiasm subject matter experts have for their fields. This was a trait I could relate to as a "contracting nerd" myself. Through these daily conversations, my understanding deepened not just about the specifics of what we were buying, but also the significance of these purchases to our mission.

This experience was transformative. I came to realize that while processing contracts was part of the job, the true essence of my role was to act as a business advisor. This newfound perspective ignited a passion within me. A drive to assist my customers in solving complex problems and enabling mission success through strategic contracting. Understanding the "what" and "why" behind contracts is crucial. This insight helped me transition from just executing tasks to providing valuable, mission-driven contract solutions.

Stepping away from the routine of Blanket Purchase Agreement (BPA) transactions opened my eyes to a variety of contracting tools, each offering unique advantages. OTA was an incredibly flexible

tool for basic, advanced, and applied research. The SBIR program provided a gateway to innovative early-stage ideas and technologies. BAAs, with their streamlined process, invited industry and academia to offer creative solutions to a wide range of challenges.

Now that I was empowered with an understanding of our customers' needs and the tools at my disposal, I had to address the contracts themselves. The contracts I encountered were in a state of disarray. The documentation was often insufficient and there was a notable lack of consistency in the processes. More concerning, however, was that many of the orders were being placed against expired ordering vehicles; they were not valid orders. Recognizing these issues, I brought them to the attention of my Division Chief, only to learn a critical lesson in problem-solving: identifying a problem also means being prepared to address it.

I was assigned, along with my colleague and friend Scott Stallsmith, to tackle these issues head-on. Our mission was to revamp the existing contracts and establish more efficient and coherent processes. This endeavor was as challenging as it was rewarding, pushing us to expand our understanding of various regulations and policies. For me, this was an environment ripe for problem-solving, something I had been craving.

Scott and I formed a strong professional bond through this experience. Our mutual enthusiasm for contracting turned our downtime into friendly "FAR-Offs" — competitions where we would test each other's knowledge of the FAR. These sessions were a fun testament to our dedication and passion for the field of contracting. If you find your inner "nerd" in your profession, you will never work a day in your life.

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