Proactively Tailored Acquisition Models

The "Google Maps" for Acquisition

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The Department of Defense (DoD) acquisition system is a complex enterprise that requires professionals with many years of experience to expertly execute. The acquisition workforce is highly encouraged to tailor the acquisition process to most efficiently deliver capabilities; however, despite such broad leadership support, acquisition personnel struggle to understand where and how to best conduct tailoring activities.

Acquisition tailoring encourages a program to modify the acquisition process, program documentation, acquisition phases, and decision levels to most effectively address the program's needs. Tailoring is intended to give the acquisition workforce flexibility and autonomy. Frank Kendall, former Under Secretary of Defense for Acquisition, Technology, and Logistics (AT&L), actively encouraged program managers to think critically and customize the acquisition process the best way they see fit within the constraints of the regulations' intent and statutory requirements.

Many in the acquisition workforce do not have the experience, knowledge and resources to facilitate tailoring. Those who have the experience and vision to tailor processes often face resistance from policy and process own-

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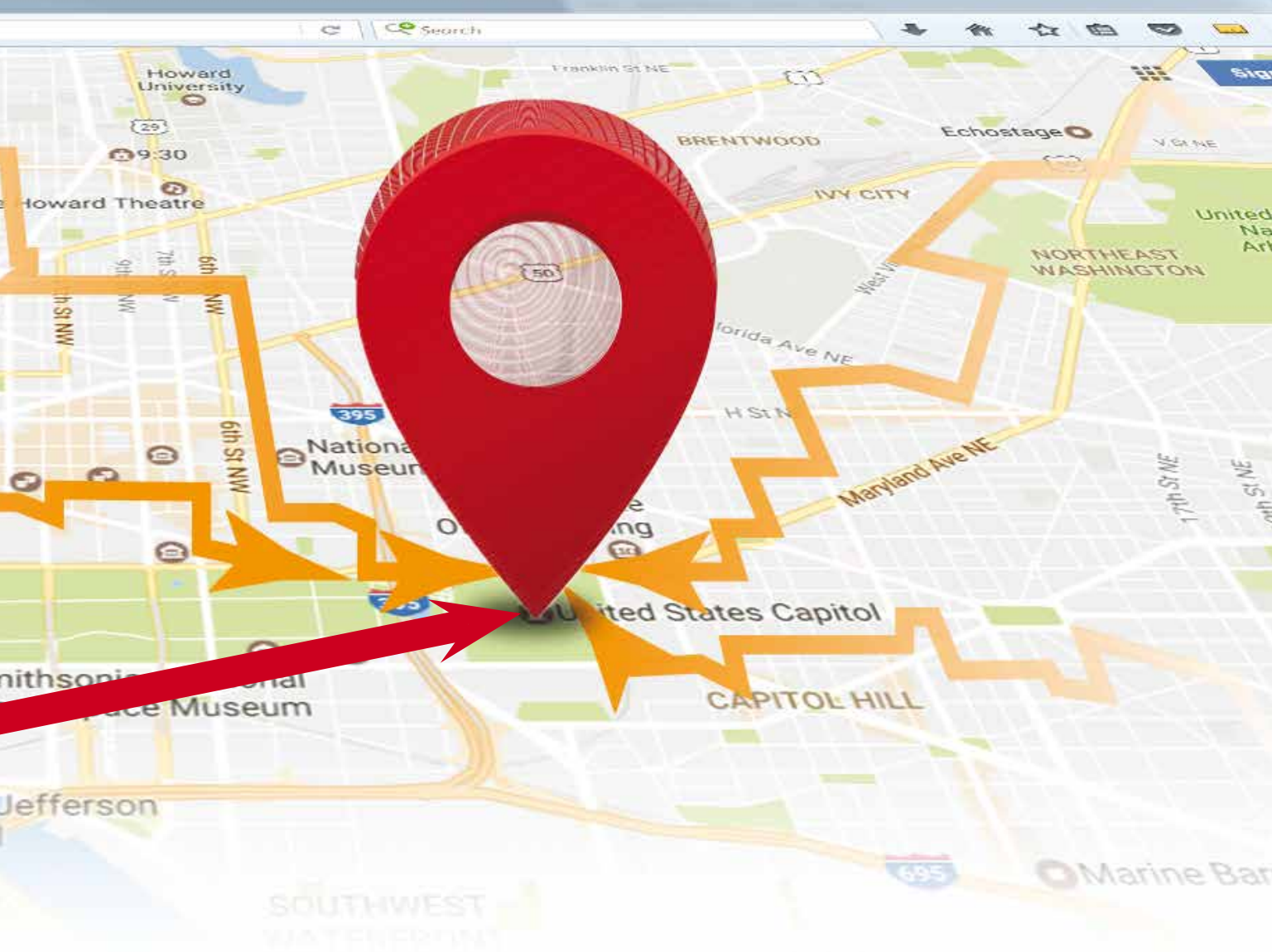
ers when seeking to deviate from traditional methods. Furthermore, while current acquisition policy guidance encourages tailoring, in practice there is no policy statement or guidance on when and how tailoring should be conducted. Given the increasing complexity and challenges of the DoD acquisition system, a different way of approaching acquisition is needed to accelerate the learning curve and reduce complexity. Proactively tailored acquisition models can offer a solution to these challenges by enabling the acquisition workforce to navigate the complex acquisition life cycle more efficiently and effectively.

Current Tailoring Practices Need Change

DoD Instruction (DoDI) 5000.02, places a strong emphasis on tailoring and presents six high-level acquisition models based on the type of product or the need for accelerated acquisition. The policy states explicitly: "acquisition programs should use these models as a starting point in structuring a program to acquire a specific product." Kendall outlined in the July-August 2012 *Defense AT&L* magazine article titled "Optimal Program Structure" that "each program be structured in a way

that optimizes that program's chances of success. There is no one solution. What I'm looking for fundamentally is the evidence that the program's leaders have thought carefully about all of the [technology, risk, integration, other] factors."

There are several institutional obstacles that make acquisition tailoring a difficult and challenging exercise. First, each program is presumed to be unique and must undertake the tailoring process on its own. Currently acquisition tailoring resembles "re-inventing the wheel," as each program must strike its own deal with the acquisition executives and independent functional process owners to obtain approval for tailoring. Second, few programs have documented and shared tailoring successes across the acquisition community, and the circumstances in which tailoring has been allowed are not transparent or well defined by the acquisition process owners. Third, acquisition executives and process owners are often inconsistent in what features they allow to be tailored for each program. Even though tailoring is highly encouraged, there is strong cultural resistance to break from traditional methods. AT&L has reinforced the

Figure 1. DoD Instruction 5000.02 Model 3 Incrementally Deployed Software Intensive Prorram
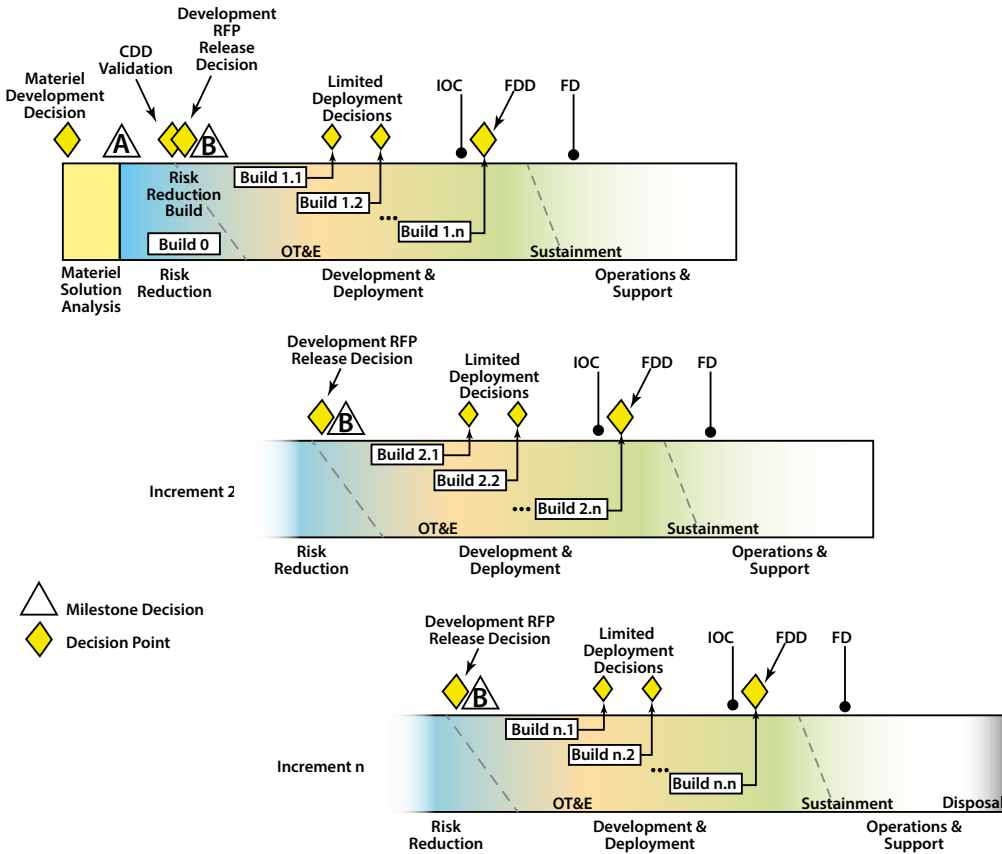
Source: The U.S. Department of Defense.

acquisition chain of command between the program manager and Milestone Decision Authority (MDA) to minimize external interference, but the process owners still exert significant tailoring influence.

In February 2015, the Government Accountability Office (GAO) published a report "DoD Should Streamline Its Decision-Making Process for Weapon Systems to Reduce Inefficiencies." The report states that programs can spend up to 2 years meeting 49 information requirements and staffing them through up to 56 organizations for approval. The GAO recommended that DoD eliminate non-value-added reviews and documents, consolidate reporting, and delegate approval authorities.

A New Way of Thinking About Acquisition
Today, acquisition professionals are expected to tailor the DoDI 5000.02 on their own. This can be compared to handing them a map and telling them to figure out the best way to drive from New York City to Los Angeles. If this is their first time traveling this route, it would take a lot of time to study the map, plan the route, talk to others about shortcuts, and encounter traffic and detours along the way. Perhaps they will reach their final destination, but not without wasting significant time and fuel. Proactively tailored models are the Google Maps for acquisition. Routes are optimized for the type of product or service

being acquired with turn by turn guidance for each acquisition phase. Tailored acquisition models provide the acquisition workforce with a prechartered route that guide users on a path for success.

Tailored acquisition models are prefiltered to provide only the information, processes, documentation, and reviews that are relevant for that type of acquisition. If a Service or Portfolio Acquisition Executive approves these models for their organization, programs no longer have to request tailoring permission and obtain waivers from multiple oversight organizations. Programs can operate with pre-authorization to streamline specific procedures and documents based on the type of product or service being acquired.

DoD Instruction (DoDI) 5000.02 features a series of six high-level models that serve as examples of tailored defense program structures. For example, an incrementally deployed software intensive program should use Model 3, outlined in Figure 1, as a starting point for the acquisition.

If a program wanted to execute a software program using an Agile development methodology, the program would need to figure out how to tailor Model 3 to address the unique aspects of Agile development. Without guidance or experience, this can be a difficult and daunting task. Figure 2 is an example of a proactively tailored model for acquiring capabilities using an Agile software development methodology. The MITRE Corporation developed this model based on input from Agile experts across the acquisition community, and it builds on the success of programs that were early adopters of Agile in DoD. This model goes beyond the DoDI 5000.02 to provide the workforce the next level of detail across the acquisition life cycle. For example, instead of managing all requirements via a large Capability Description Document that can require 2 years to develop and coordinate, programs can use an Information System—Initial Capabilities Document (IS-ICD)—and manage a program backlog of user story requirements. System design, development, integration and testing goes from a linear approach for the whole system to a series of releases and sprints that each go through the full development cycle to regularly field a subset of capabilities. This model is not intended to be

a one-size fits-all solution for every Agile acquisition program, but offers a sold starting point for a program to further tailor as needed.

Each acquisition program has unique requirements and features; however, several categories or groupings of acquisitions could benefit from having their own tailored acquisition model. DoD could develop a suite of proactively tailored acquisition models to cover a broad range of commonly acquired products and services, such as aircrafts, ships, ground vehicles, space systems, missile/munition, information technology (IT), communications and networks, business systems, and technical services. Conversely they can be designed around acquisition type or methodology (e.g., agile software development, cloud-based services).

Tailored acquisition models will not replace or eliminate critical thinking. They will offer a better starting position for the acquisition workforce to work from. This enables the workforce to spend less time identifying the processes and documents, less time negotiating the tailoring processes with functional leaders, and more time designing innovative strategies to deliver mission critical capabilities. Best practices and lessons learned can be folded into the models to more broadly replicate effective practices throughout the workforce. This will accelerate the learning curve for the acquisition workforce by providing more direct access to the information that is relevant to each acquisition and saving the workforce considerable time and effort that might otherwise be lost attempting to identify and

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seek concurrence on the required activities and documentation. Programs can save months in planning and coordinating a tailored approach.

Figure 2. Example of a Tailored Acquisiton Model for Agile Software Development
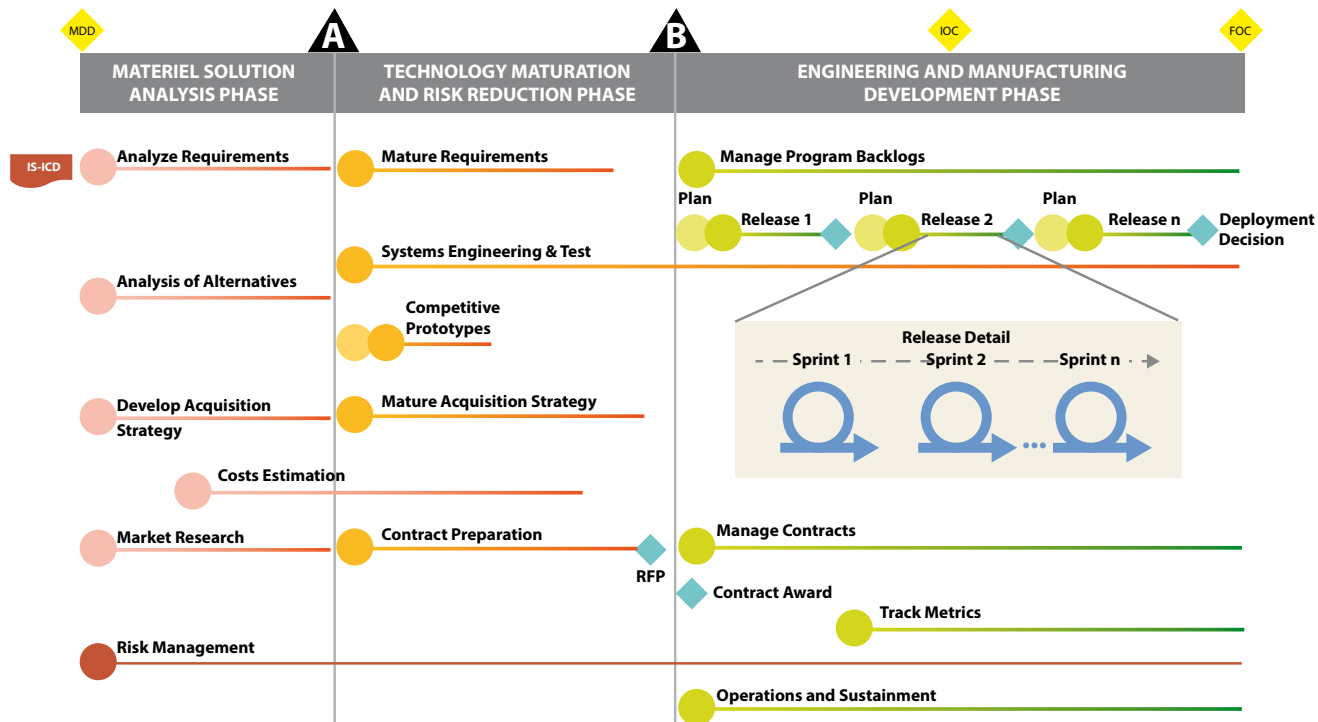
Source: The MITRE Corporation.

Given that IT acquisitions can range from system development to acquiring IT as a service, all programs shared a common initiation phase to perform upfront analysis and to determine the best acquisition model to follow.

program structures and acquisition processes to effectively adopt Agile software development methodologies. Agile has seen a rapid growth in adoption across the DoD and the federal government with a strong demand for guidance on how to effectively integrate Agile concepts into the acquisition environment. MITRE is working on publishing a tailored Agile software development acquisition model and others via an online platform available to government sponsors to demonstrate how the defense acquisition workforce can effectively leverage Agile strategies and tools.

Summary
Proactively tailoring a suite of acquisition models helps to focus programs on their particular core elements. As a result, acquisition professionals can navigate the acquisition life cycle faster, leveraging the best practices and exemplar strategies of many previous programs. This would enable them to spend less time identifying the processes and documents required and more time designing innovative strategies to deliver affordable systems that leverage leading technologies. Assembling a team of experts from across the DoD to chart clear paths for each major type of acquisition program would improve the rigor and success of acquisition and respond to DoDI 5000.02 guidance to tailor the acquisition process. ✪

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Models ideally would include guidance and recommended templates for each required program document with tailored questions to drive critical thinking for the unique aspects of the program strategy. Acquisition executives could infuse their strategic guidance into the models with better assurance that programs will follow them as they navigate the acquisition life cycle. Each organization can collect best practices and lessons learned from acquisitions of that particular program type and integrate the Service-unique policies, processes, documents, and approvals into the model.

Tailored Models in Action
In 2014, MITRE worked with the Defense Information Systems Agency (DISA) Component Acquisition Executive (CAE) and operational directorates to develop nine proactively tailored IT acquisition models. The models spanned multiple development, commercial/government off-the-shelf, and IT services alternatives. Given that IT acquisitions can range from system development to acquiring IT as a service, all programs shared a common initiation phase to perform upfront analysis and to determine the best acquisition model to follow. DISA captured the models in a guidebook outlining the key activities in each phase and providing many references. Each section included key questions for acquisition professionals to stimulate critical thinking about program strategies and execution. DISA's CAE stressed that the workforce should not blindly follow the acquisition models in a cookbook fashion, but rather use the models as a guide to navigate the complex environment and tailor the acquisition based on their own program environment.

In 2014, MITRE published a *Defense Agile Acquisition Guide* outlining how DoD IT acquisition program offices can tailor

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MDAP/MAIS Program Manager Changes

With the assistance of the Office of the Secretary of Defense, *Defense AT&L* magazine publishes the names of incoming and outgoing program managers for major defense acquisition programs (MDAPs) and major automated information system (MAIS) programs. This announcement lists all such changes of leadership, for both civilian and military program managers for the months of November-December 2016.

Army
Col. Joseph A. Hoecherl replaced **Col. Jeffery E. Hager** as project manager for the Apache Attack Helicopter (AAH) on Nov. 3.

Navy/Marine Corps
None

Air Force
Col Dennis O. Bythewood relieved **Brig Gen Michael A. Guetlein** as program manager for the Space Based Infrared System Program (SBIRS) on Dec. 15.

Fourth Estate
None