STANDARD
PROGRAM
STRUCTURE
CH4+CL2
HO3
CH2
CHCL3+CL2
CH4+Cl2
H2CF
FC2
Fe
t=10°C
SiO2
HNO3
YO:H

Striving for the Optimal Program Structure

Patrick M. McGinn

The July-August 2012 issue of *Defense AT&L* published an article by Under Secretary of Defense for Acquisition, Technology and Logistics Frank Kendall titled "The Optimal Program Structure." The genesis of Kendall's article was a question concerning the same topic he had fielded from a student during a question-and-answer session with one of the classes at the Defense Acquisition University. His thesis was grounded in his discussions with the acquisition workforce about Better Buying Power initiatives throughout the preceding year.

Kendall's article noted that "[t]here is no one best way to structure a program," emphasizing that "[t]he first responsibility of key leaders in the acquisition workforce is to think" and that, when determining how best to structure a program, "[y]ou begin with a deep understanding of the nature of the product you tend to acquire," noting that "[t]he nature of the product should be the most significant determiner of program structure" and that there is a need to understand technology maturity, design complexity, integration difficulties, manufacturing technology, and the inherent risks associated with each of these areas. He accurately observed that "[t]he behavior I'm afraid I've seen too much of is the tendency to default to a 'school solution' standard program structure," noting that he has "seen programs twisted into knots just to include all the milestones in the standard program template." He postulated two causes for this: first, our leaders don't know any better and, second, they think it's the only way to get a program through the system.

To extend these observations, one may ask 1) why don't these leaders know any better, 2) why do they think the school solution is the only way to get their programs approved, and 3) is the nature of the product truly the most significant determiner of program structure? In my opinion, the answers to these questions boil down to two things: training and the institutional characteristic of the workforce. My hope here is to explore more deeply and expound on these topics and provide additional "food for thought" as we consider the possible answers to these questions.

New entrants to the acquisition workforce are taught the acquisition process on their first day, and, as they advance in their careers, the process is continually ingrained into their psyches, progressively making them less able to respond to variables and unknowns. Much as a computer can execute only installed code, a person trained only in process cannot respond to

---

McGinn *is a retired Marine Corps officer, F/A-18 pilot, and former Naval Air Systems Command PMA-265 Integrated Product Team Lead who now works as an analyst for a defense contractor.*

situations outside the confines and complexity of the "installed code." A chef uses culinary knowledge and skill to create a fine dish, whereas a cook merely executes a recipe to create the same dish. If an ingredient must be substituted or a cooking technique modified, chefs use their knowledge and skill to adapt and produce an acceptable dish, while cooks executing a recipe will likely end up with a gastronomical failure. In the same light, military leaders are filled with knowledge, taught skills, provided with rules, and then given mission-type orders to reach an objective. The process used to reach the objective is left up to the leaders, thereby giving them the flexibility to respond to variables and unknowns as they proceed along a path toward their objectives. Military leaders who merely execute processes are little more than automatons easily defeated in the fog of war.

Thinking outside the box or deviating from prescribed standards and processes introduce risk, and bureaucracies abhor risk.

The roadblock that prevents us from teaching the acquisition workforce to cook like chefs or lead like soldiers, sailors, airmen, and Marines is the institutional nature of the workforce itself. More and more of the acquisition workforce today is made up of civil servants, many of whom have spent lifelong careers in government. As we well know, government bureaucrats and bureaucracies thrive on standardization and conformity. We've all heard the expression "get along to get ahead," and in a bureaucracy no words were more truly spoken. Thinking outside the box or deviating from prescribed standards and processes introduce risk, and bureaucracies abhor risk. Compliance with and execution of standard processes often are rewarded while the introduction of innovative change is ignored or shunned, particularly if it reduces the size and scope of the bureaucracy itself. Execution of process often becomes the metric for success rather than the efficient and expeditious delivery of effective products or services.

As anyone who has studied animal behavior will tell you, when you reward a behavior, you get more of it. When it is not rewarded, or if it is punished, you get less of it. Our processes are an important means to an end, but they need to be deglamorized and put back where they belong—in our "toolbox." I don't reward a carpenter for how well he drives a nail with a hammer or cuts a 2x4 with a saw. I reward him for how well he builds my house. Like the chef who uses culinary knowledge and skill to create a fine dish, the carpenter uses his knowledge and skill to build my house. The hammer and saw are merely tools he uses to build the house.

Having a deep understanding of the nature of the product is certainly important. However, something even more important and central for key acquisition leaders appears to have been missed. If the acquirer lacks an intimate understanding of the nature of the user, there is a good chance the product or service acquired for the user will fail, regardless of how well it was developed, tested, and produced, and regardless of how well the technology maturity, design complexity, integration difficulties, manufacturing technology, and risks were understood. The acquisition workforce is full of very intelligent individuals, but many of them have never experienced the nature of the user. With each passing year, fewer and fewer of them are being exposed to or work with the user; therefore, they may have little understanding of what the nature of the product they are acquiring should be. Many key leadership billets in the workforce that once were filled by active duty servicemen and women now are filled by career civil servants who have never spent a day in uniform. Active duty end strength was at a post-Vietnam War peak of 2.17 million in 1987. As part of the "peace dividend" after the Cold War ended in 1991, active duty end strength was gutted by 36 percent, plummeting to just 1.38 million by 2000 where it has hovered for the last 12 years. In past conflicts and wars, active duty end strength was increased to meet operational demands.

When the Global War on Terror commenced after the attacks of Sept. 11, 2001, end strength was not increased. Operational demands from that war have continually drained active duty personnel from acquisition staffs, leaving key billets unfilled or back filled by civil servants. These individuals, who often lack an understanding of their military customers, find themselves unable, and sometimes unwilling, to communicate effectively and regularly with the most important person in the whole acquisition process—the end user. Therefore, they tend to focus inwardly on the technology and the execution of process as their metric for success. I don't see active duty end strength increasing any time soon, so I don't foresee these key acquisition billets being filled by individuals who are focused on the nature of the user. We need to identify, hire, train, mentor, and retain individuals who can quickly understand and effectively communicate with a user who frequently is saturated by current operational tasks and who has little time or capacity to discuss the nature of a product that might not be fielded for years.

To be truly successful at building an optimal program structure, a leader in the acquisition workforce needs to understand four equally important elements: process, product, customer, and team. We've touched upon the dangers of merely executing process. However, I would prefer to avoid using the term "process" altogether and focus instead on the importance of imparting knowledge, teaching skills, and understanding the rules that are action boundaries. A leader who is armed with knowledge, skills, and bounding rules, and who is assigned a clear objective, has the flexibility to respond effectively to variables and unknowns and successfully reach the objective.

The acquisition process should merely be a tool in the "toolbox" that is used to reach the objective. Knowing how to use a tool is important, but knowing when to use it is even more germane. We teach leaders how to use a tool, but we often don't teach them when to use it.

Understanding the nature of the product is certainly critical, but as I've expounded here, it is only half of the equation. To avoid the risk of producing what might technically be an excellent product but one that is irrelevant to the end user, a leader must also understand the nature of the user, i.e., the customer. If a leader lacks personal experience with the nature of the user, effective and regular communication with the end user is an absolute must in order to be successful. The last element of success—understanding the team—is equally as important as the other topics. At the end of the day, the structure of any program is made up of people, and it is those people who make up the team. Many acquisition leaders and key billet holders I see today execute management principles ad nauseam, yet few are taught and mentored on how to be leaders.

The military individuals who filled these positions in the past came from a career field that demanded leadership and team building skills, where failure could result in the death of a teammate. The inability to lead a team effectively is one of the quickest paths to failure, regardless of how well you understand process, product, or customer.

I have two items posted on the wall in my office that I look at every day. One is an iconic image of Uncle Sam pointing his finger at me under which is written "Have You Talked to the Fleet Lately?" The other is a quote from an unknown source that says, "In any program built on technology, education in management principles without technical competence is simply a different path to failure." Both of these keep me grounded in the four things that are important to success: process, product, customer, and team. What we need in order to reach the "Optimal Program Structure" are acquisition leaders who are selected, trained, mentored, rewarded, and promoted to think instead of merely to execute process; to communicate effectively and regularly with and understand their customers, resulting in an understanding of the product; and to lead rather than simply manage a team.

The author can be contacted at **mcginnpm@gmail.com**.

Expand Your Network

- Available 24/7
- More than 40 different acquisition-related Communities of Practice and Special Interest Areas
- Access to policies, guidance, tools, and references
- Automatic notification of new content (by subscription only)
- Ability to tap into the wisdom of the community
- Interact, share resources, ideas, and experiences with fellow practitioners across DoD and industry

Acquisition Community Connection (ACC)
Where the Defense Acquisition Workforce Meets to Share Knowledge

https://acc.dau.mil