Increasing Program Management Effectiveness Through Single Process Facilities

Simple In Concept, Complex In Implementation, But Potentially Extremely Productive

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In June of 1994, the DoD took a major step toward implementing real reform by mandating the use of performance specifications and standards and, where not appropriate, the use of commercial specifications and standards. But those changes – as important as they were – effectively applied to new contracts only. The DoD has now taken the next major step toward reforming the department's purchasing practices in approving guidance implementing a "single process initiative" to reduce the number of government-imposed processes on existing contracts. As with many good ideas, it is simple in concept, complex in its implementation, yet extremely productive when properly engaged.

The Impetus — Why Do We Need Change?

Institutionalizing single process facilities and encouraging their rapid introduction is a job that I believe program managers (PM) will welcome because their rewards are great in two areas that PMs care about the most: cost and schedule! When coupled with the realities of a declining budget and the warfighter's constant need for affordable systems and equipment, it begins to take on an even larger presence. I will address the following three fundamental issues in this article:

- Why single process facilities are worth pursuing.
- How single process facilities relate to other initiatives.
- What the PM or PM staff role should be in this regard.

Finding and exploiting innovative business practices is necessary if we are to achieve the objectives of acquisition reform. Business as usual is simply not supportable with today's budget constraints.

Is the Single Process Initiative Worth the Pursuit?

First, the need for pursuing the single process philosophy is centered on addressing the realities of today as we prepare for tomorrow. Finding and exploiting innovative business practices is necessary if we are to achieve the objectives of acquisition reform. Business as usual is simply not supportable with today's budget constraints. The dynamics of the defense industry are changing in response to unparalleled downsizing and restructuring within both government and industry. The dynamics of technical management have experienced dramatic change as well. Some leading-edge companies have shown ability to reduce both cycle time and cost by 30 to 50 percent, while significantly improving quality.

The DoD is making substantial progress in changing the way we do business – significantly reducing the size of Requests for Proposals (RFP), reducing the unnecessary imposition of military standards, and implementing Integrated Product and Process Development (IPPD). However, while our industry partners are responding to the new realities of defense acquisition, their efforts to dramatically improve processes have been limited. Dramatic improvement will require a reengineering of many of the core processes within our contractors' facilities.

Process reengineering has been understandably difficult, if not impossible, under the traditional way of doing business because of requirements in existing contracts, and the lack of a mechanism for the multiple customers using a facility to work together. Despite the efforts of individual PMs in a facility to streamline their RFPs to provide needed flexibility, it is difficult, if not impossible for contractors to

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make substantial plant-wide changes to their processes unless other customers in their facility take similar actions to provide the needed flexibility.

Providing flexibility and teamwork to focus on process improvement and the use of implementation of best practices are the real benefits of the single process facility approach. For industry this will promote long-term competitiveness. For DoD programs this will mean more efficient and effective industrial processes, facilitating our goals to acquire products and services better, faster, and at less cost.

The single process initiative provides opportunities for contractors to reengineer and standardize processes on a facility-wide basis where it makes good business sense. Technical as well as business processes are targets for potential improvement. The move to single processes in a facility does not preclude the flexibility to tailor process applications of the single process to individual programs in that facility. The true benefit will accrue from allowing contractor ownership of their processes, and in doing so, encouraging contractors to baseline and improve their processes by applying best practices.

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Burt completed a distinguished 24-year career in the U.S. Navy in 1989. During his Navy career, he completed three tours in Southeast Asia and had numerous high-level assignments as he progressed up through the rank of Captain.

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RELATED TRENDS IN ACQUISITION REFORM

Key Areas	Conventional View	New View
Requirements	"What" (system performance) and "How To" (specs & stds)	"What" not "How To" — system performance balanced to life cycle cost
Source Selection Criteria	Reliance in specs/stds — process issues secondary	Reliance in system performance requirements — process issues and past performance significant
Technical Approach	Serial design, development, and production	Integrated process using IPPD — collocated engineering — design for mfg., IPTs, advanced engineering, and mfg. practices
Contractor Processes	Dictated by specs/stds — major customers	Dictated by best commercial practices and continuous improvement efforts
Quality	Inspection intensive, accept rework	Quest for perfect first time, quality achieved through design and mfg. process effectiveness
Design Trades	Cost dependent on performance — true costs of trade-offs obscure or unknown	CAD-CAM tools — modeling and simulation — using cost as an independent variable — cost included in design databases
Government Oversight	Adversarial based on overseeing compliance — lacking trust	Growing collaboration based on process insight/measures of process maturity and trust

But How Does It Fit With Other Acquisition Reform Initiatives?

Second, it is important to understand how the single process initiative fits with other ongoing initiatives. The Defense Manufacturing Council recognized the need for improvement in the Department's technical management processes, and has taken positive actions to support and facilitate the implementation of a number of related acquisition reform practices:

- Use of System Performance Requirements
- Implementing Integrated Product and Process Development
- Developing Measures of Process Maturity
- Improving Risk Identification and Management
- Providing Requirements Flexibility and Using Cost as an Independent Variable
- Facilitating Single Process Facilities
- Integrating/Harmonizing of Related Service/Agency Initiatives

Some of the changes taking place related to these initiatives are shown in the Figure (bottom of preceding page). Synergy exists among all of these initiatives, and implementation of these initiatives in a coordinated fashion will facilitate industry making the major changes necessary to deliver products better, faster, and cheaper. Changes to processes may take the form of standardizing and/or reengineering their processes to eliminate unnecessary requirements, or apply improved practices, or a combination of the foregoing.

I am encouraged because a number of contractors have already started this process, and their results have been impressive. The long-term benefits to be gained are promising indeed and should include – among other benefits – improved competitiveness.

What Are the Roles of the PM and Staff?

Lastly, the significance of your role as PM, or member of the program management team, can hardly be overstated. You are critical to these initiatives because of your role in developing requests for proposals and your technical (and management) responsibility for the process requirements levied through contract requirements. What we are experiencing in the area of technical and other related acquisition reform initiatives have presented program managers with many opportunities to help ensure the success of their programs.

Role of the Professional Acquisition Workforce

Perry's memorandum of December 6, 1995, and Kaminski's memorandum of December 8, 1995, have led the way in defining a streamlined "block change" approach for the implementation. The cognizant Defense Contract Management Command contract administration office and the administrative contracting officer will facilitate the process of implementation. You, as a key customer, will play a pivotal role in providing your leadership in setting the tone and creating the environment for contractor single process efforts to succeed. You as a PM can influence the effective implementation of the single process facility initiative in a number of ways:

- Clearly articulate the importance of contractor process effectiveness on your program and encourage your contractor to make the shift to single processes – the sooner the better.
- Actively participate in local management councils overseeing the review of contract process change proposals.
- Ensure that negotiations stay on-track, and do not get bogged down over "rice bowl" or inconsequential issues.
- Ensure that future RFPs are structured to facilitate contractor flexibility, and place appropriate emphasis on contractor process effectiveness.
- Make process maturity and measures of process effectiveness a key aspect of program management.
- Encourage flow down of single process flexibility to subcontractors and suppliers.
- Recognize the achievements of government and contractor personnel.

Another key area that will need focus in the approval process is the impact of contractor proposed changes in terms of cost, schedule, and product and process risk. Use of earned value management systems will provide the PM visibility, planning, and tracking discipline necessary to understand the potential impact to guide process improvement efforts. Your early engagement as part of the management council will expedite this analysis and do much to assure timely approval of concept papers.

Conclusions

Streamlining the acquisition process is aggressively underway, and the single process facility initiative is critical to the PMs – hence the Department's – overall success. Previously, contractors working with the government have been inhibited from making major changes in many of their core processes because of "how to" requirements in existing contracts and similar, but different requirements of other customers in the same facility. The combination of these factors has hampered reengineering of contractor core processes.

Perry's December 6, 1995 memorandum indicates that "we cannot afford 'business as usual' to delay this initiative." The single process facility concept has enormous potential for facilitating acquisition reform implementation. When effectively implemented, it can provide contractors the impetus and flexibility to improve processes and establish a close government and industry working relationship oriented toward improving contractor and program effectiveness. This initiative will benefit all concerned from taxpayer to warfighter. The ultimate success is clearly dependent on the leadership of the PM and the program office staff. You are crucial to the success of this approach.