“We see potential reuse of the technology and processes to continuously improve our own operations.”

~Steve Chenard, Manager of General Dynamics C4 Systems Operations Business Systems and Transformation team

General Dynamics is a market leader in mission-critical information systems and technologies; land and expeditionary combat systems, armaments and munitions; shipbuilding and marine systems; and business aviation. As one of the largest defense contractors in the world, General Dynamics was faced with a significant undertaking when the Department of Defense (DoD) issued its policy on Item Unique Identification (IUID). Like so many other suppliers, it was faced with the challenge of how best to incorporate this technology into an existing business process with the least amount of cost or disruption of operations. Also similar to other suppliers, the magnitude of the effort begged the question, where do we start?

Finding a Starting Point

According to Steve Chenard, who manages General Dynamics C4 Systems Operations Business Systems and Transformation team, the first step is education. “The most difficult part of achieving compliance was in first gaining a good understanding of what was actually required. We searched the web, listened to consultants and suppliers, attended DoD seminars and even formed our own General Dynamics Corporate Council with all of the General Dynamics Companies participating. Once the requirements firmed up and were well understood and risk areas were identified, the initial sense of complexity faded away.” As the requirements became clear, however, it was necessary to obtain stakeholder buy-in for the implementation. “The next step was to engage more of the stakeholders in the organization and to move them forward into a series of pilot steps. Once a commitment was made to sponsor a pilot, the development and testing was relatively easy.”

Conceptualizing a Solution

Even after they had the support of their stakeholders, Chenard notes that they were careful to proceed with caution and prepare for possible changes in the policy. By starting with an abstract scenario, they conceptualized a variety of ways to apply the technology before investing in a single process or method. “We started with a very low cost pilot approach actually doing a ‘paper pilot’ where we simply used our existing product process mapping to walk through, imagine, and play ‘what if’ scenarios out for key IUID insertion points,” Chenard explains. By first visualizing the process, Chenard says the General Dynamics C4 Systems team generated answers to a number of questions before they became issues in implementation. “We started with the proposal, worked our way toward contract creation and project set up, and asked ourselves:

- How will I let people know that there are IUID requirements?
- How will I flow the clause to my suppliers?
- Do I want to flow the clause to suppliers or do I want to control the marking in-house?
- What about material receipt and my own production?
- What happens at sell off?”

Only after the team addressed each of these questions did they commit to running an incremental micro-pilot. For Chenard, the abstract preparation was an invaluable step in equipping his team with the knowledge and understanding necessary to develop an effective implementation process. “By running through the processes beforehand and finding out more about the capabilities of the technology, it provided both a good learning opportunity and a start to developing in-house expertise.”

Communicating Expectations

In addition to the internal “paper pilot,” General Dynamics also reached out to their DoD customers to ensure they had a common understanding of requirements and expectations. By communicating clearly and openly, they were able to avoid any unpleasant surprises. As Chenard notes, “It was very important to engage our local DCAA and DCMA partners in the development of compliant business processes. We received excellent participation and support throughout our discovery and piloting. At the end there were no surprises, and we were all in agreement on the proper approach.”
Managing Change

Even as the team was moving forward with implementation, however, a continuing challenge was the potential for policy modifications. According to Chenard, “The final rulings and policy had not yet been completed when we started. We knew we needed to take a risk in starting before we knew everything, otherwise we might not be in a compliance position when all the rules were firm up.” The team balanced time constraints with possible changes to the policy by building a small amount of flexibility into their own process: “We hedged and added additional fields to our database, made small incremental investments and piloted everything before moving ahead. This mitigated risk pretty well for us and limited any potential rework.”

Achieving Compliance

General Dynamics achieved compliance with their first shipments in the spring of 2005, and their implementation successes continue today. Though the company has not yet seen financial ROI, Chenard notes that there have been many other benefits to implementation. “General Dynamics C4 Systems is able to maintain our leadership position with our customers, satisfy our local and end customer needs, and better support our troops by demonstrating additional commitment to their needs.” He also expects that compliance will give them an edge in the marketplace in the near term: “Early positioning of ourselves as IUID-ready allows us to offer our customers additional services on IUID for maintenance and overhaul programs with Government Property intensive material management needs, for instance. Customer goodwill and an ability to clearly state in new proposals that we are compliant and able to meet the IUID clause will enable us to win new business where IUID is required.”

Visualizing Future Benefits

Chenard also looks to IUID to enhance business processes in the future. “We see potential reuse of the technology and processes to continuously improve our own operations. We may be able to use the IUID information stored in our database for warranty tracking, configuration management and control, shop floor control and monitoring, as well as historical analysis. By having a vision for what could be, simple adjustments to information fields or data capture points could help achieve additional ROI and business process improvements.”

(A General Dynamics network operations center. General Dynamics photo.)