Building Communities of Practice

Team Meetings Build Networks and Trust for Online Collaboration

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The Systems Engineering Community of Practice recently began a series of face-to-face meetings to expand membership and increase member involvement. Systems Engineering is but one of a growing number of communities within the Program Management Communities of Practice. This community is an Office of the Secretary of Defense initiative that is being executed by the Defense Acquisition University (DAU). The Navy Acquisition Reform Office has been an integral partner in the stand-up of this initiative.

Members of the Systems Engineering Community of Practice from the DAU Midwest Region at Wright-Patterson Air Force Base participate via VTC hook-up in the first community meeting, held July 11, 2002, at the VTC Center, DAU Capital and Northeast Region, Fort Belvoir, Va.

Knowledge Access Will Mitigate Future Lack of Mentors

Traditionally, new personnel reporting to a program office were mentored by more experienced personnel as they learned their jobs within the acquisition community. However, with about 50 percent of the acquisition workforce becoming retirement-eligible by 2005, there may be insufficient mentors available within an office or organization to handle such a large number of replacements.

Thus, the Program Management Communities of Practice are designed as a knowledge management system to allow acquisition personnel to easily access information outside their office or organizational structure. Even if no one within the organization knows the answer to difficult problems, in all likelihood someone within one's own community of expertise can help.

Registration—Putting People in Touch

A central mission of the communities of practice is putting people who have a problem in touch with others who can help them. One major focus of building the communities of practice is to get people to register as community members. Registration is simple and can be accomplished online at http://www.pmcop.dau.mil.

Registration provides a type of "Yellow Pages," listing contact information for people with expertise in particular areas. As DAU leader of the Systems Engineering Community, I find this database essential for identifying people who are

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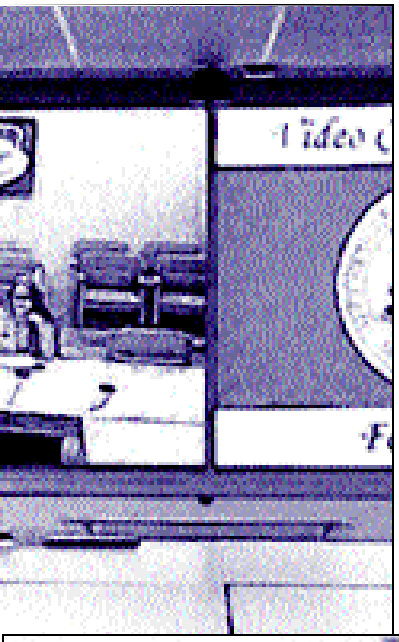
Photos by Tara Flores, Navy Acquisition Reform Office

most likely to possess the knowledge and experience necessary to advise registrants who request assistance with a problem through the community Web site.

Registration and participation are completely voluntary. You may access and use the communities of practice without registration. However, only registered users may post material to the site and access personal information about other registered users. These restrictions are necessary to comply with current DoD policies concerning Web site security and privacy.

Noel Dickover, Navy Acquisition Reform Office, and Dave Brown, DAU, listen to inputs from community members.



Harry Botsford, Naval Air Systems Command, speaks to community members on computer tools for Systems Engineering.

Other Support Tools

The communities of practice provide a variety of other support tools to assist the acquisition workforce. One of the most frequent scenarios DAU receives from the field is an individual who is assigned a task, and is looking for a good example from another program of what the final product should look like. We are looking for good examples of unclassified documents such as Systems Engineering Management Plans, Modeling and Simulation Master Plans, Test and Evaluation Master Plans, etc., for use by other community members. We have available a number of documents and job aids and are looking for programs and other organizations that have developed in-house products they are willing to share.

One example of a recently acquired job aid is an automated tool for assessing technology readiness levels. Two versions are available: one for hardware and the other for software. These tools were developed by the Government Accounting Office (GAO) and provide an estimate of the technology readiness level based on responses to a set of questions about the technology. Use of this tool by DoD programs should provide

a valuable aid in that program managers should be able to get a good idea of where the GAO would assess their technology readiness level. If the level does not match the recommended level for a particular milestone, the PM can work with the tool to figure out what things need to be changed to achieve the desired level.

Another example of an automated tool is the PC/S risk management software provided by Aeronautical Systems Center Engineering Directorate at Wright-Patterson Air Force Base. This program provides an excellent risk management tool that provides a color scatter plot identifying high-, medium-, and low-risk areas being assessed. The program has even been modified in response to inputs by community members requesting format changes and additional functionality.

Collaborative Online Projects

Many organizations leverage information technology to conduct collaborative online projects from geographically dispersed locations. Management guides dealing with these types of projects recommend a face-to-face meeting of participating team members at the beginning. This allows team members to develop personal relationships and to build trust for working together in a virtual environment. Collaborating online is easier if you can place a face and an actual person with impersonal communications such as phone calls or e-mails.

Borrowing a page from this manual, the Systems Engineering Community of Practice began face-to-face meetings to spread the word about PMCoP and to allow people to network and develop personal relations for follow-on online collaboration. The first of what is hoped to be a series of community meetings was held July 11, 2002. The meeting was held in the VTC Center, DAU Capital and Northeast Region at Fort Belvoir, Va. Members from the DAU Midwest Region at Wright-Patterson Air Force Base participated via VTC hook-up. Over 40 people representing a broad cross-section of both industry and government attended the meeting and presentation.

The speaker, Harry Botsford of the Naval Air Systems Command, focused his presentation on automated tools for Systems Engineering. Presentations are planned around member consensus on topics of interest. A survey conducted at the stand-up of the Systems Engineering Community of Practice found strong user interest in automated or computer-based tools to assist members in performing daily office tasks.

Botsford provided an excellent presentation on a number of such tools that are available and have been successfully used in program applications. Hopefully, community meetings will begin at other geographic locations as the regional DAU campuses stand-up to full-service capability and onsite leaders are identified.

Meeting the Needs of the Members

The Communities of Practice are an OSD acquisition excellence initiative. However, the guidance from OSD has been to tailor the communities to whatever structure the membership collectively agrees upon. I can assure all readers that as the leader of the DAU Systems Engineering Community, I have not received any guidance or instruction from OSD other than to ensure that whatever is done meets the needs of the members.

The success or failure of this initiative will rest in the hands of the acquisition workforce; therefore, I encourage everyone to log on, register, participate, and provide your input. If you have particularly good things going on in your projects or programs, consider sharing them with others. It will likely be a difficult period during the latter half of this decade as we replace a number of acquisition workforce members and the new members gain the experience of the people they replaced. It is not necessary to reinvent every wheel and relearn every lesson. An online repository of knowledge, tools, and information and a network of domain experts who are willing to help anyone with a problem will make everyone's job easier.

If you still aren't sure that this is something you want to support, consider this: That big cost overrun caused by an inexperienced person making the wrong decision—even though information was available that could have prevented the mistake—just might be in your program!

Editor's Note: Brown welcomes questions or comments on this article. Contact him at dave.brown@dau.mil.