

Warrior Knowledge Network Information Sheet

Shaping Knowledge for the Future



The Warrior Knowledge Network (WKN) is a US Army Training and Doctrine Command initiative that is focused on the development of tactical knowledge systems that will change the way the Army thinks about, works with and uses knowledge and information. The program is organized on two major thrusts. The first is focused on information and making our products work better in meeting the needs of soldiers. This involves exploiting new technologies, new approaches to digital production and new ways of packaging information to support decision making. The second thrust is focused on knowledge and finding the best methods to tap into the experience base of our soldiers and leaders. This involves developing peer-to-peer networks, subject matter expert networks and mentoring networks across the Army.

In order to achieve these objectives, the WKN organizes around "communities of practice". In a general sense, communities consist of a group of people from a common profession who come together in an on-line environment to assist and learn from one another. Typically, a community is drawn from a particular branch or functional area and is sponsored by an Army schoolhouse.

Why a Focus on Communities?

Knowledge exists in two broad forms - explicit and tacit. Explicit knowledge is the most common form that is found in most organizations and refers to the written artifacts of an organization. It exists in such forms as databases, documents, e-mail, spreadsheets and other forms of physical materials. Tacit knowledge, on the other hand, is that information that is found in the experience base of individuals in the community. It is not written, and therefore, is difficult to identify and difficult to process.

Communities of Practice provide one of the best means for enabling organizations to capture and share both tacit and explicit knowledge across the community. Explicit information is shared through focused content centers and tacit information is shared through interaction and dialogue, building relationships, creating meaning, persuading and influencing. Organizations benefit from an improved network of contacts and better results. Individuals benefit through peer group recognition and continuous learning. Other reasons for building communities include:

- They facilitate information-sharing and organizational learning. They exploit existing competencies to achieve maximum return.
- They facilitate the transfer of best practices and lessons learned between organizational content centers, which allows the organization to incorporate current, effective methodologies.
- They fill in the gaps where organizational knowledge falls short. Communities of Practice encourage personnel to access key resources and build new knowledge to complete tasks faster, better and easier. In other words, they provide for rapid development and dissemination of tactics, techniques and practices

Getting into the Action

The WKN is a testbed operation that provides assistance to prospective communities in developing domain knowledge systems. In general, WKN staff will work with a domain proponent (usually a schoolhouse or battle lab) by providing consultant support (information structure, design and community management) and the basic community infrastructure. A proponent is responsible for providing a community manager and content development to support community startup.

The basic community infrastructure consist of five components.

- A Content Center serves as a central library that is focused specifically against the community needs. Ideally, any government reference material that community members feel is relevant to the domain is placed into this library. Typical libraries include pertinent laws, regulations, reference materials, doctrinal manuals, articles, graphics, presentations, messages, sample products, operational documents, historical vignettes, lessons learned and observations from community members. The goal is simple, one-stop shopping for any information you may ever need.
- A Knowledge Center serves as a next generation information product that is built against small "knowledge legos" that can be combined and reused in any number of ways to build any type of product the user may need. When fully developed, these products will be tailorable to the unique interests of the user and will be output in any type of format from standard text through robust multimedia that the user desires. Through this system, a soldier could receive a field manual in text, comic book, audio or as a movie, depending on his or her desires. The same system will be used to build new types of reference materials that can be totally unique for each user, such as a personal battle book or lifelong learning text that automatically updates itself every time it is requested.
- A Collaboration Center provides an online environment in which soldiers can link to their peers or other subject matter experts in real time or through discussion boards. Similar to today's list servers, a soldier can pose a question to the entire community, who can then respond and provide assistance. This capability acts, in many regards, like the individual's private staff to assist in getting the job done.
- A Mentoring Center uses the software from the Collaboration Center to link junior community members with senior members to provide support for career development and to provide connectivity to Army "culture and values".
- The Delivery Center is really in support of the above components and provides a web-based system for configuring outputs and products to insure the best possible delivery for each user. In the Delivery Center, products can be configured to support on-the-fly learning, lifelong learning or performance support. Based on the most current research, it will offer ways to achieve the future vision of the adaptive soldier, leader and unit.

Why Warrior Knowledge Network? Why Now?

Soldiers in today's operational environment need access to an extremely wide range of basic unclassified information and knowledge. This includes doctrine, TTP's, best practices, background info on an area, historical info, lessons learned, field observations, etc. However, as the information appetite gets larger, we are on the verge of a major failure in our ability to support soldiers with these basic products. As we fall back and look at the big picture, we can see several trends that contribute to this shortfall. First, information is becoming too hard to find. Information that soldiers need may be spread over any number of web-sites, spanning the military, commercial, academic and other internet domains. Search engines are becoming less and less valuable and it is up to the soldier to know where to go for specific information. Knowing where to go is only the start, as each site has its own unique security requirements and navigation structure. The bottom line is that it is just too hard to get what you need to help you do your job. A second problem is that the amount information is growing at a much faster rate than our ability to deal with it. This is information overload. The tools to help us sort through this immense amount of information are not keeping pace and we're never sure if the answer we get is the real answer. At the current rate of information growth, the soldier in the year 2010 will face an information burden roughly 30 times greater than what we suffer through today. A third problem is that, as an Army, we don't learn very well. Everyone is familiar with the standard cycle of when a new person takes over a job, they spend several months learning the job, several months performing at the journeyman level and then a few months as the expert - just in time to leave. The next person repeats the cycle. While the technology exists to break this cycle, we do not capture and catalog the information that will let someone move into a job and access the lessons learned by his/her predecessor to begin performing almost immediately.

While each of these problems is valid and impacts on our performance, the real reason that a program like Warrior Knowledge Network is needed is simply that when we send soldiers into harm's way and do not provide them the basic information that they need to do their job in the best way possible ... they fail in their mission, they may be injured or they make mistakes that must be corrected. The operational environment of the past decade brings this point home.

"The first time we fail our soldiers is a lesson learned - the second time is negligence"

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