Knowledge Management in Global War Games

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Global War Game is the annual Title X War game sponsored by the Naval War College. The Global War Games of 1998, 1999, 2000, and 2001 are a series of games designed to explore operational potential of forces with 21st century capabilities as articulated in the strategic documents, Joint Vision 2010 and 2020. Global 01, the 23rd Navy Title X game, was conducted from 16-27 July 2001 at the Naval War College in Newport, RI. The Chief of Naval Operations attended the Executive Session on 26 July 2001.

Knowledge Management (KM) was first identified as a major area of interest in the Global War Game Series in 1999, and has every year since has been included for research and experimentation. This article will provide an overview of the application of Knowledge Management concepts for warfighters in the Global War Games over the last 3 years. Each year the experience builds on the previous year to advance the evolution and understanding of KM in future warfare.

Global 99’s KM focus was primarily with speed of decision-making. Summarized then by RADM Chuck Munns – "Knowledge management is all about making good decisions and implementing them faster than the other guy. Decisions are the core of what we do, and a key aspect of decision-making is cycle time. We shouldn’t try to be faster just to be faster, but faster when it makes a difference."

KM in Global 99 manifested in the Network Operations Center (NOC). The NOC was established as a staff organization to the Commander, Joint Task Force. The NOC concept, centered on a Knowledge Manager/Information Manager whose responsibilities were to monitor information flow, encourage the use of available collaborative planning tools, and to assist with problems associated with internal communications.

In Global 00, the KM focus expanded in recognition that the critical role KM plays in the creation of battlespace awareness. New tools were introduced, such as the Knowledge Wall, Information Workspace, and the Theater Assessment and Profiling System. The game’s rapid pace and scope quickly challenged data mining and knowledge management efforts and presented the players with the potential for information overload and the tools with "system" overload. It became evident that future information and knowledge management improvements should include more fully developed Command and Control (C2) business rules and more clearly defined information collection, analysis, and dissemination protocols. Global 00 saw the emergence of a role for a facilitator of information at the Commander Joint Task Force (CJTF), which became referred to as a "Knowledge Warrior". The "Knowledge Warrior" handled the problem of "shaping the knowledge" from the information on the Knowledge Wall, at first in response to the CJTF’s information requirement and as the game progressed in anticipation of the CJTF’s information requirements, which greatly increased the speed in which the Commander could make decisions.

In Global 01 the primary focus of KM was addressing the need for standardized procedures and an enabling, tailored toolkit of various information technology applications to plan and execute warfare in a multi-tiered collaborative environment. KM efforts for the War Game were extensive throughout the year working up to Global 01. The efforts were centered on the processes required for a multi-tiered collaborative environment and
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were documented in the Global 01 Players’ Handbook, also referred to as a Standard Operating Procedures document. A full article documenting the significant KM/IM-related insights from Global 01 will be provided in the CHIPS Winter 2002 issue.

The good news is that we are clearly seeing the culture shift. Between Global 99 and Global 01 there is significantly less abhorrence to the use of electronic tools. In Global 99 it was not until game end that people shifted from the more familiar collaborative tools (telephone, informal face-to-face (sneaker-net), and email) to web-based functions (Chat, Net Meeting, etc.) It took almost the full 2 weeks to develop some confidence in working with the Wargaming Information Grid System (WIGS) and recognizing WIGS as the authoritative source of data. In Global 2000, the Web-based functions and WIGS were much more readily accepted as the authoritative source of data. New tools were introduced and there were concerted efforts at using all the tools. By Global 2001, players not only were comfortable in the "e-environment" but had shifted to recommending enhancements that were implemented and provided for use. This shows not only an acceptance of the electronic tools, but an increased savvy in the technology.

However, there are still many challenges with the acceptance to new processes and changes that are required to fully leverage the technology. This underscores the importance of the Joint Mission Force thrust to develop business rules, standardized procedures and Tactics, Techniques, and Procedures (TTP). This standardization will provide a fundamental part of the framework needed to maximize the capabilities inherent in the new technology.

We still are evolving with these processes that are needed to take advantage of the connectivity to unharness the power for Network Centric Operations, not unlike business and the Internet. Professor John J. Donovan observed in "The Second Industrial Revolution Business Strategy and Internet Technology", (Prentice Hall, New Jersey, 1997. p. 33), "Today’s use of the Internet is on the scale of using laser technology solely as a three-hole paper punch"

We are progressing on an evolutionary journey to creating a Revolutionary Advantage. The Global War Game Series has contributed to this evolution by providing a forum for awareness and experimentation of KM concepts that are critical to achieving the visions for the future of the U.S. military as defined in Joint Vision 2020.

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