# **Knowledge Management Section**

## August 2008

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## **Headquarters, Department of the Army**



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#### **Preface**

This manual provides doctrine for the organization and operations of the knowledge management (KM) section. It establishes the doctrinal principles, tactics, techniques, and procedures necessary to effectively integrate KM into the operations of brigades, divisions, and corps.

FM 6-01.1 has an introduction and three chapters. The introduction expands on the manual's purpose and summarizes the doctrine it contains. Chapter 1 discusses the basic KM definitions, principles, and concepts. It concludes by discussing the relationship among battle command, knowledge management, and information management as well as the KM process in the operational Army and in Army force generation (ARFORGEN). Chapter 2 provides doctrine for KM section organization and functions. It also addresses Soldier duties and responsibilities. Chapter 3 discusses the KM process and associated techniques and procedures that KM sections use to improve KM within staffs. Appendix A contains checklists for content management. Appendix B contains techniques for adapting the after action review technique used during training to support learning during operations. Appendix C includes interviewing techniques for collecting observations, insights, and lessons from operations. Appendix D provides a sample agenda for KM working groups.

FM 6-01.1 applies to KM sections in Army headquarters from brigade through corps. ("Brigade" includes brigade combat teams, support brigades, functional brigades, and multifunctional brigades.) The manual applies primarily to KM section members. Finally, this manual provides the doctrinal guidance for commanders, staffs, and leaders of the organizations responsible for KM in operations.

Army headquarters serving as the headquarters of a joint force land component command or joint task force may adapt this manual with appropriate modifications until joint doctrine or guidance is provided and technology and doctrine support operations with multinational partners. Army technology is not mature enough to support multinational forces, and joint doctrine and technology do not yet allow KM interoperability.

FM 6-01.1 uses joint terms where applicable. Most terms with joint or Army terms are defined in both the glossary and the text. *Glossary references*: Terms for which FM 6-01.1 is the proponent publication (the authority) have an asterisk in the glossary. *Text references*: Definitions for which FM 6-01.1 is the proponent publication are in boldfaced text. These terms and their definitions will be in the next revision of FM 1-02. For other definitions in the text, the term is italicized and the number of the proponent publication follows the definition.

FM 6-01.1 applies to the Active Army, Army National Guard/Army National Guard of the United States, and U.S. Army Reserve unless otherwise stated.

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### Introduction

#### **GENERAL**

The twenty-first century is the age of the network and globalization. Its environment is one in which opportunities and rivals may come from anywhere. Successful operations in this environment depend on both innovation and the organizational learning underpinning this innovation. Success also requires unprecedented speed in learning, transforming that learning into new expertise, and applying that expertise to innovation. Innovation will significantly influence all aspects of the Army for the foreseeable future, partly because of the changing environment and partly due to ongoing operational and training transformations.

#### THE ROLE OF KNOWLEDGE MANAGEMENT

Although military forces have performed knowledge management activities implicitly since military operations began, the term "knowledge management" has only recently been identified and used. Throughout history it has been said that knowledge is power. But since 1980, it has become more evident that knowledge shared is power. Knowledge management doctrine has been developed to increase Army advantages in conducting operations. It does this by providing systematic and explicit management of the Army's organizational knowledge and its Soldiers' individual knowledge.

Military staffs evolved as the need to provide knowledge to commanders and to subordinate and adjacent forces increased. Even in the time of the ancient Greeks and Romans, rudimentary staffs existed to provide knowledge for commanders. As the complexity of warfare increased, the size and functions of staffs expanded. However, all military staffs continued to perform two major functions: First, they carried out functions for commanders that commanders could not perform alone or that required specialists, such as engineers, artillery, and logistics. Second, military staffs developed and managed information. They gathered and organized information, analyzed it to create knowledge, and applied it in planning and decisionmaking. Staffs also transferred information to the commander, other staff members, and higher, subordinate, and adjacent organizations.

The creation, organization, application, and transfer of knowledge—in these examples and through the nineteenth century—were all performed manually and within individuals' minds. Some collaboration took place, but usually those involved had to be in one place. Occasionally, commanders met in a formal council of war, but this did not necessarily result in collaboration as currently understood. Transfer of information could be accomplished with physical means, such as co-location, flags, sounds (bugle, drum, flute), and lights. However, transfer of knowledge depended on messengers. Often these messengers were high-ranking officers with authority to amend instructions to fit changes in the situation that occurred while they were traveling.

Before the nineteenth century, commanders frequently reached decisions by synthesizing knowledge staff officers provided them. The nineteenth century brought the rise of formal staffs that began to formalize the creation, organization, application, and transfer of knowledge. New staff procedures allowed for more collaboration and synthesis of knowledge before it reached commanders for decision. Moreover, the formal delegation of authority to staff officers permitted them to direct functions that the commander no longer had the time or expertise to perform personally. During this period, the first nonmanual information technologies were developed: among them, telegraph, telephone, radio, phonograph, and dictating machine. However, with few exceptions these devices could not store information, let alone knowledge products.

The development of electronic information technology in the second half of the twentieth century brought new capabilities for the creation, organization, application, and transfer of knowledge. These capabilities enabled collection and storage of vastly greater quantities of information, making greater quantities of

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knowledge available to more users. That, in turn, led to the development of knowledge management (KM) as a discipline, which the Army accepted in 2003.

#### EMERGING KNOWLEDGE MANAGEMENT REQUIREMENTS

The years since publication of FM 3-0 (2001) and FM 6-0 (2003) have brought significant changes to how the Army manages information and knowledge. These include the growth of KM within the Army and refinement of associated technology—both hardware and software. As the use of KM practices has grown within the generating force (formerly the institutional Army), operational Army organizations have attempted to use them as well. KM sections are already active in modular divisions—even in ones for which a KM section has not yet been authorized. And the Army is developing authorizations for KM sections at brigade through theater army headquarters.

Doctrine for the KM section's roles, responsibilities, and functions has been lacking. However, incorporating KM into doctrine is underway with the revisions of FMs 3-0, 5-0, and 6-0. This effort involves ensuring that Army doctrine nests with joint doctrine and is coordinated with organizational design, training, and leader development initiatives. It also requires incorporating input from the Army—especially the operational Army. Finished doctrine requires staffing, coordination, and resolution of differences.

Nonetheless, ongoing operations and continuing work in Army transformation require implementing some doctrine for KM immediately. FM 6-01.1 is the first step in meeting this need. It establishes doctrine for the KM section during operations. Feedback will be incorporated into FMs 5-0 and 6-0. It will also guide development of a future, overarching KM field manual.

#### **Knowledge Management in Afghanistan**

This vignette describes how knowledge management techniques improved the operations of Combined Joint Task Force 76 in Afghanistan in 2006. The commanding general had stated the following information requirement: "I want to know how many missions over the last 30 days were conducted by the 3d Brigade Combat Team and how many utilized aviation assets." Answering this question required the staff to manually search multiple personal folder storage (PST) files and call subordinate units. Answers using these procedures were often neither exact nor timely. To answer this recurring information requirement as well as others, the task force needed a faster, more accurate process.

The task force KM officer and Information Dissemination Management–Tactical (IDM-T) contractor examined the procedures used to synchronize planning efforts and coordinate mission briefs. (IDM-T was the task force's main information management tool.) Their analysis documented the following:

- Each subordinate unit had its own technique for tracking operations. Most units used static spreadsheets.
- Once a mission was received, task force and subordinate staff sections began
  parallel planning. For example, the sections synchronized intelligence resources
  (such as unmanned aircraft systems) and fires assets (including artillery and
  close air support).
- Staff sections frequently synchronized assets without the approval or knowledge
  of the task force chief of operations. This was a major problem, since the chief of
  operations was responsible for controlling all task force assets.
- When preparing situation briefs for general officers, current operations personnel from multiple staff sections lacked visibility of the overall operation.
- Access to draft operation orders was a problem when the staff tried to gather data in response to information requirements.