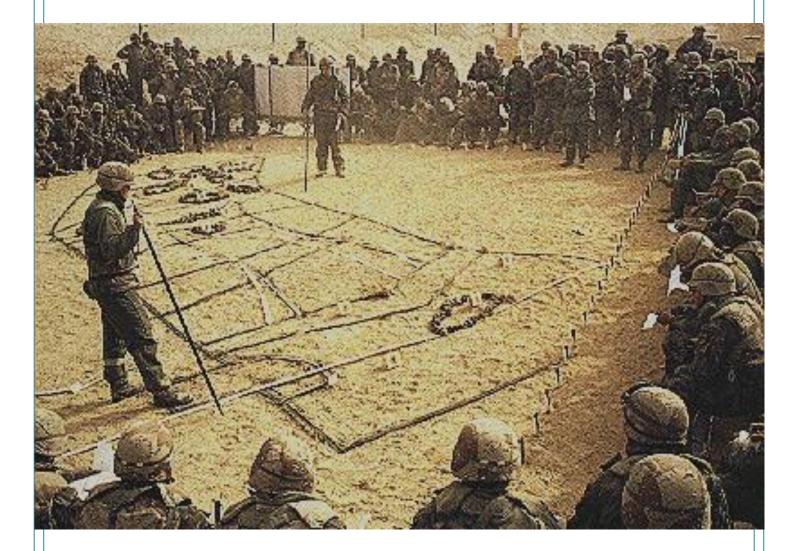
Executing Knowledge Management in Support of Mission Command

Establishing a Knowledge Management Program



Army Operational Knowledge Management Proponent 31 October 2012

Forward

This handbook provides Knowledge Management officers, warrant officers and noncommissioned officers a better understanding of the Knowledge Management cycle and what they can do in order to better prepare and execute the process for their units. A planned and resourced Knowledge Management program assists the staff in streamlining information flow, and enables the Commander's decision making process.

This handbook briefly addresses the roles and functions of soldiers performing as Knowledge Management Officers (KMOs) and Knowledge Management Representatives (KMRs). The Army relies on Knowledge Management to assist the Staff and Commander in developing more effective Mission Command processes. Knowledge Management is a key enabler in the Mission Command decision making process. This handbook will assist the KMOs in understanding what a functional Knowledge Management Section is capable of executing in conjunction with the larger staff, and how to begin what can be a lengthy and iterative KM process.

This handbook has been developed using lessons learned from soldiers in the field. Input was provided by Knowledge Management soldiers serving in units in the Trained/Ready and Available/Deployed phases of ARFORGEN, and the Combat Training Centers (CTCs).

Some key lessons learned . . .

- Leadership must actively participate and support the Knowledge Management program; gaining that leadership involvement must be one of the KMOs first objectives.
- Knowledge Management must be initiated during the plan/prepare phase of operations (Reset phase of ARFORGEN); the program is unlikely to succeed if the unit waits until execution.
- Knowledge Management is an iterative process; a series of small changes will build into the larger changes desired, with less turmoil.
- Knowledge Management is a people-centric process; the technical systems enable the KM process, but cannot be the focus of it.

Andrew M. Mortensen LTC, AR Chief, AOKM Proponent

Purpose of This Handbook

This handbook is intended to help Army knowledge professionals establish knowledge management in their organization. A knowledge professional is anyone directly involved in aligning the people, processes, and tools of an organization to facilitate knowledge flow. Knowledge professionals can include: Commander, Chief of Staff or Executive Officer, Primary Staff Officers, Knowledge Management Officer, members of the Knowledge Management Section, Knowledge Management Representatives, and others directly involved in Knowledge Management.

This handbook provides KM professionals one approach to transitioning into a knowledge management position more effectively and efficiently. The tasks in this handbook are designed – not as a systematic method of implementing knowledge management – but as a means to generate thoughts and ideas on how Knowledge Management professionals can establish themselves in their duties.

This handbook reference has incorporated lessons learned from a variety of organizations which have themselves established a successful KM program. It should be understood that successful Knowledge Management programs require multiple cycles of the KM process; not everything can be achieved in one cycle.

This handbook is written from the perspective of an officer, new to Knowledge Management, who has been assigned as Knowledge Management Officer (KMO) to an Army division; though the general concepts can be adapted to any situation.

Before you begin using this handbook, read and understand FM 6-01.1, Knowledge Management Operations (July 2012). It will provide the background necessary to understanding this handbook.

Mission Command and Knowledge Management

Mission Command is an inherent part of all operations. Mission Command is the exercise of authority and direction by commanders, supported by their staffs, using the art of command and the science of control, to integrate the other warfighting functions in the conduct

of full-spectrum operations. Fundamental to Mission Command are the organization's decision-making and knowledge transfer processes, which is where the knowledge professional takes on an important role.

Knowledge Management is an integral part of Mission Command. Knowledge Management (KM) supports the commander by providing the



Figure 1: Mission Command in Focus.

bridging focus between the art and science of command. Effective Knowledge Management is an essential task in Mission Command, and can directly influence the organization's success in combat.

Knowledge Management is the process of enabling knowledge flow to enhance shared understanding, learning, and decision making. The objective of KM is to create shared understanding through the alignment of people, processes, and tools within the organizational structure and culture, in order to increase collaboration and understanding. The creation of Shared Understanding results in better decisions and enables improved flexibility, adaptability, integration, and synchronization, resulting in better organizational decision-making.

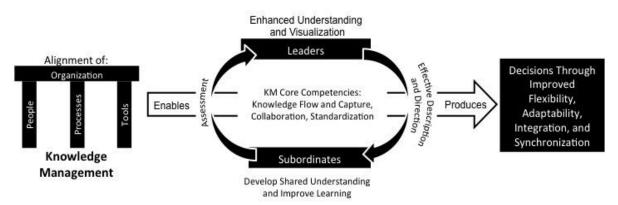


Figure 2. Knowledge Management Supports Decision-Making.

Fundamentals of Knowledge Management

Knowledge Management (KM) is the process of enabling knowledge flow to enhance shared understanding, learning and decision-making. KM consists of four components (people, processes, tools, and organization) and is a five step process (FM 6-01.1, Knowledge Management Operations).

Assess information flow in the organization. Identify obstructions to the free flow of information (knowledge gaps), and identify the means of eliminating or minimizing those obstructions (knowledge solutions). The problem may be as simple as difficulty in finding reports on a website, with an equally simple solution, or as complicated as synchronized the collective knowledge of an Army corps.

Design KM products and processes which effectively and efficiently improve information transfer. Determine which knowledge strategy will best meet the unit's information needs. This could be as complicated as designing a knowledge network, or as simple as redesigning reports that provide the commander decision-making information.

Develop a knowledge management solution to the problem, and requirements, processes and procedures which implement the KM solution.

Pilot the KM solution by implementing it on a small scale and testing it with soldiers. Identify and correct problems, and prepare it for full implementation in the organization.

Implement the validated, to include training and coaching personnel in their roles and responsibilities. Monitor the implementation in order to identify and correct problems.

It must be understood that KM is not a single cycle process, but an integrated series of cycles – some sequential, some in parallel – which improve the processes of knowledge acquisition, analysis, and presentation. These processes are critical to Mission Command, which is why this handbook focuses on Mission Command, and the organizational knowledge processes that support decision-making.

If the KM team gets it right, the Commander spends his time making critical decisions, and not trying to find documents. This is where the new-to-the-job KMO can achieve early successes, and where the Army Knowledge Management Proponent recommends that new KMO's focus their efforts.

Reference: FM 6-01.1, Knowledge Management Operations, July 2012

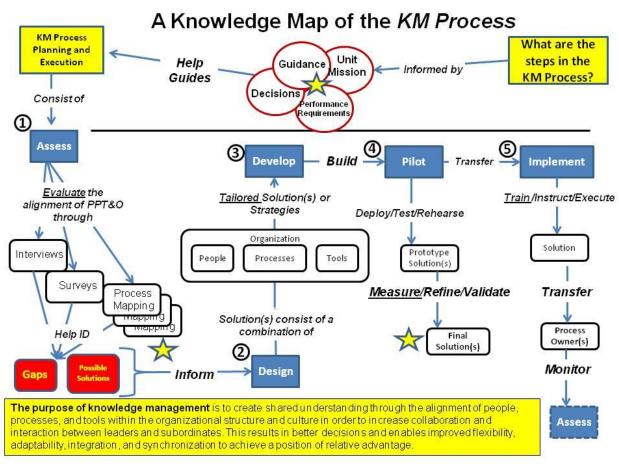


Figure 3. KM Knowledge Map.

A Knowledge Management Framework

In Knowledge Management, as with most everything, success requires a good plan; in this case, a plan to implement a KM program. Experience in implementing KM programs in major Army organizations indicates a three-phase approach, focused on Mission Command and decision-making, to be the most likely successful approach.

In Phase 1 (Hey, I'm Here), you must establish KM as a concept that will make the Commander, staff, and organization more efficient and effective – and therefore more successful. Experience has shown that, along with developing relationships with the staff (in order to build support for the KM program), it is absolutely critical that the unit's leadership actively supports the KM program. When the Chief of Staff, Executive Officer, Commander are pushing the program, it will develop into greater effectiveness for the unit. If they don't, the KM program will flounder.

The objectives of this initial phase are twofold; achieve leadership buy-in, and demonstrate the utility of a KM program. Accomplish these initial objectives by personal discussions with the leadership and staff, and some initial KM successes (quick wins). This will establish the KM program and develop some initial momentum.

In Phase 2 (An Easier Way), you will build on the relationships and early successes in order to establish the KM program as a means to greater efficiency (less time to do the same work) and effectiveness (doing more with the available resources).

The objective of this phase is to develop the support of the staff and subordinate organizations for the KM program, and begin identifying and solving organizational knowledge gaps. Accomplish these objectives by identifying and solving some of the unit's knowledge flow problems (not-so-quick wins), thereby establishing KM as a means to greater effectiveness. You will also begin development of a long-term KM program.

In Phase 3 (Mission Success), you will build the KM program into an integral part of the unit's Mission Command and decision-making processes. Accomplish this with long-term, detailed assessments of the organization, which are then developed into long-term improvements to the units decision-making and knowledge flow processes. There is no end to this phase, and it will require a lot of detailed staff work.

If, as recommended, you read and understand FM 6-01.1, you should have a good understanding of the KM Process (Assess, Design, Develop, Pilot, Implement). Understand that a KM program is not a single cycle of the KM Process, completed over the course of months or years. Rather, a series of "quick wins" and other improvements to the unit's Mission Command and decision-making processes, each of which will involve its own cycle of Assess, Design, Develop, Pilot, and Implement.

In other words, the KM process is not a single cycle process, but rather an integrated series of cycles – some sequential, some in parallel – which together translate knowledge into operational effectiveness and then operational success.

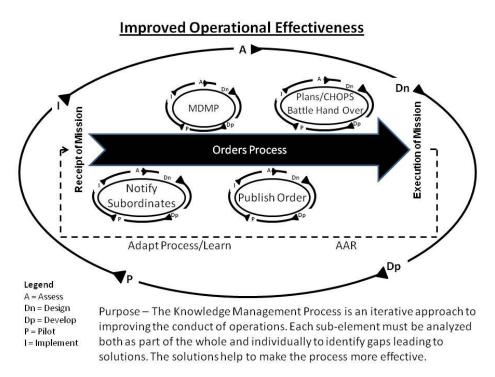


Figure 4. Improve Operational Effectiveness.

Things to Consider First

Whether you learned you were being assigned to a KM position before or after reporting to a new organization, taking the time to develop an initial plan will always make your transition to a KM position more successful. This is a form of assessment, and a good start point is an assessment of your own KM knowledge and experience.

Know Yourself

Conduct a self-assessment of your knowledge management expertise and experience. An accurate self-assessment will enable you to prepare for your assignment as a knowledge professional, and will enable an objective organizational assessment when you arrive at your new organization. Knowledge management is primarily a human process, and it is critical that knowledge professionals understand themselves and how they interact with that process.

Review what you know and what you should know. Identify the training and skills you will need in your KM assignment, and act to acquire the necessary training and skills prior to reporting into your new organization. It is especially important that you have a thorough understanding of the fundamentals of knowledge management and the KM process.

Experience has shown that the successful Knowledge Management Officer (KMO) must be more than a technologist; the successful KMO must also be well grounded in Mission Command, the operations process, the Military Decision-Making Process (MDMP), and Army decision-making. An understanding of how technology supports those processes is useful, but not critical.

Understand the Organization

It is also important that you begin to develop a basic understanding of the organizational culture (people and processes). This is necessary to transitioning into an organization with as little friction as possible, and will aid in identifying obstructions to knowledge flow.

First, acquire the organization's operating documents; Standard Operating Procedures (SOPS), Commander's Critical Information Requirements (CCIR), Commander's intent, KM SOPs (Knowledge management, Content management, and Information management), KM plans, and Annexes, policies, strategies, and similar documents. These documents are necessary to understanding the organization's knowledge environment; understanding them prior to reporting is critical to your initial success.

Acquire the same documents and information for the organization's higher headquarters, as this is an important aspect of the organizational environment. Study these documents, and consider how they are used (or not used), how often they are updated, and how they affect the organization's knowledge and decision-making processes.

Second, contact current KM personnel in order to learn as much as possible about the organization's KM policies, procedures, process, and priorities, and culture. Identify those who support Knowledge Management (in order to encourage their continued support) and those who would hinder Knowledge Management (in order to convert them to a supporter). Understanding how those people interact and how they influence knowledge flow in the organization will be key to your initial efforts in Knowledge Management.

Learn as much as possible about how people collaborate and interact in order to understand how they interact and their roles in knowledge flow – the organizational culture. To the extent possible, learn about how the staff and subordinate organizations collaborate as well.

Keep in mind that shared understanding is as much a function of how individuals collaborate and share knowledge, as it is adherence to a set of standardized procedures. In order for an organization to be successful, there must be effective collaboration, and an important aspect of Knowledge Management is ensuring that occurs.

Using the documents and information obtained, analyze current organizational processes for evident knowledge gaps; events and processes that hinder the collection, analysis, and sharing of information critical to decision-making. Focus on organizational decision-making processes (how the commander acquires and processes the information necessary to decisionmaking), and the organization's battle rhythm (how the staff acquires, analyses, and reports information necessary to decision-making), as these are areas in which a new KM officer can have an immediate impact.

If the organization has a Knowledge Management Working Group (KMWG) you will want to understand how this group functions. Consider in your analysis: (1) does the KMWG have an SOP or a standardized methodology (if not, the group may not have a focus, and will likely be ineffective); (2) who represents the staff sections and units – Knowledge Management Representatives (KMRs) in the KMWG (if the group consists primarily of Privates or officers drafted to fill a seat, the KMWG is probably a working group in name only); does the chain of command use the KMWG to improve knowledge collection and sharing in the unit (if the Chief of Staff or Executive Officer pay no attention to the KMWG, and it is likely to accomplish very little).

Develop an Initial Plan

Based on the results of your assessment, develop a initial action plan for your first 30 days in the organization. You will make adjustments after reporting in, but this will help you avoid the "Now what do I do?" situation, common to new KM personnel.

Develop your initial plan in terms of the KM components (people, processes, tools, organization) and with four specific types of actions: (1) actions to improve your understanding of KM (e.g. additional training); (2) actions to develop your understanding of the organization's knowledge processes (you may need to attend battle-rhythm working groups or participate in meetings); (3) people you want to meet, and what you want to discuss with them (e.g. unit battle

rhythm with the Chief of Staff); and (4) actions to initiate shortly after your arrival (e.g. establishing a KM Working Group).

Consider in your plan, the existing knowledge management team, and be prepared to include their ideas and suggestions as improvements to your plan. Develop an initial intent statement in order to provide them an immediate understanding of what you intend the KM team to accomplish. It will be important that their efforts are fully synchronized with your initial plan, as you will likely find it necessary to alter your plan as you learn more about the organization.

If there is a KM Working Group in the unit, plan to convene them early, in order to better understand how that group functions, and how each individual functions within the group. Be prepared to tailor individual roles and responsibilities in order to improve the KMWG's own knowledge processes. Note who attends, and be prepared to discuss with the CoS or XO assigning representatives who can actually influence knowledge management processes in their staff section.

With a good assessment and an initial plan, you can begin immediately to improve knowledge management processes in your new organization. The plan will likely not survive first contact (flexibility will be important, especially after you are on the ground), but it can give you a quick start, and improve your chances of gaining early initial successes.

Action	Objective	Expected Outcome	
Attend AOKM Qualification	Complete course prior to signing	Increased knowledge of KM	
Course	into unit	processes and principles	
Meet with CoS on KMWG	First week; discuss better KMR	KMRs capable of implement	
KMRs	representation in KMWG	KMWG recommendations in	
		staff sections	
Convene KMWG with new	Second week; establish	KMRs understand they are	
KMRS	objectives and responsibilities of	responsible for implementing	
	KMWG	KM in their staff section, and	
		KMWG is answerable to CoS	
Analyze organizational battle	Second week; assess battle	Battle rhythm focused on	
rhythm	rhythm, identify gap and	decision-making process;	
	potential improvements	unnecessary meetings	
		eliminated	

Example of a KMO Initial Action Plan.

Phase 1: Early Successes – Your First 30 Days

Experience has shown that successful KM programs generally start with quick, simple, successes – the "low-hanging fruit" – easy actions that can have an immediate positive impact on Mission Command in the unit. Success breeds success, and nothing helps jump start a KM program like successfully demonstrating to non-supporters how KM can improve the quality and efficiency of their work.

When you join your new organization, you should immediately begin a more detailed assessment of the organization's knowledge processes, with a view to improving your initial plan. You should also begin a more detailed assessment of the organization's knowledge processes. This requires involving yourself in the organization's knowledge processes and organizations, in order to learn what it was not possible to learn prior to arrival.

In Phase 1, you have two short-term objectives: achieve leadership buy-in for the KM program, and demonstrate the utility of KM to the leadership; and demonstrate the utility of a KM program. Accomplish these initial objectives by personal discussions with the leadership and staff, and some initial successes (quick wins), in order to establish the KM program and develop some initial momentum. At the completion of Phase 1, you should have established the KM leadership team, actively involved in KM, and have established a KMWG, capable of implementing actions within the staff sections and subordinate units.

Establish the KM Leadership Team

A successful KM program requires an involved leadership team, which has the wholehearted support of the chain-of-command. The primary members of the leadership team are the Commander (the decision-maker); (2) the Chief of Staff or Executive Officer (providing leadership, enforcement, and a Mission-Command focus); and (3) the Knowledge Management Officer (staff officer responsible for assessing and improving knowledge processes); the KM Section (supporting the KMO).

Interview the leadership. One of the first things you will want to do is interview the organization's leadership (Commander, Chief of Staff, Executive Officer, and possibly the Operations Officer), with two things in mind. First, you will want to clearly establish their support and involvement in the KM program. Second, you will want to identify ways in which a KM program could simplify or ease their workload.

Make it clear that, like all things; the program will be successful only with their active involvement (a unit does well, those things the commander inspects). This is critical to a successful KM program.

During your interview, you should ask questions designed to identify where they are having knowledge-related difficulties, as a means of identifying specific ways in which a KM

program can make their job easier. From these questions can come some of those quick-wins that will help establish the KM program. For example, you could ask . . .

- Is there critical information you are having trouble accessing?
- Is the staff providing the necessary decision-making information?
- Are there reports that don't make sense, or are not clear?

Leadership TTP. The answers to these interview questions will provide ideas for initial quick successes, and some early opportunities to employ the KM process in support of the unit's leadership. For example, if your commander identified preparing for the Battle Update Brief as a continuing problem. You would then use the KM process to analyze the problem and develop a solution. It may be as simple as coordinating report procedures and templates (which can be quickly corrected), or something requiring a redesign of the flow of information among the staff (which will take longer to correct, and will probably require the work of the KMWG).

You may want to include other personnel specifically involved in acquiring, analyzing, and presenting information necessary to the organization's decision-making and Mission Command processes, such as members of the Knowledge Management Working Group. This group will be actively involved in assisting the CoS and KMO in developing and implementing improvements to those processes, and implementing those improvements in their staff section or organization.

One other point; you will want to identify early who the KMO works for, and if the answer is anything other than the Chief of Staff or Executive Officer, you will want to recommend a change. Experience has shown that a KM program is more successful when the KMO works for the CoS or XO, instead of the G6 (who looks for technical problems to solve with technical solutions) or the G3 (who tends to use the KMO as an additional staff officer, or KMO for the G3 instead of the organization as a whole.

Establish the KM Working Group

The Knowledge Management Working Group (KMWG), established by the CoS or XO, will be the organization's primary means of developing and implementing knowledge processes in the organization. The KMWG is also the primary resource with which the KMO can assess and improve knowledge flow within the organization.

Selecting the right Knowledge Management Representatives (KMRs) for the KMWG is important, especially when initiating a new KM program. The KMRs should all have an

understanding of KM and the Operations Process. More importantly, they should each have two qualifications.

First, they must be an expert in their staff or subordinate organization's processes and functions. The KMRs should be knowledgeable of the collaboration processes and procedures used within their section, and know how things work.

Second, they must have the authority to implement the changes and improvements developed by the KMWG within their staff section or organization; someone who can make things happen. KMRs should not be someone who updates information management systems, though they should understand how that content is managed. Neither should the KMR be the person who updates the collaborative sites, though they should understand that as well.

Leadership TTP. The Chief of Staff of one infantry division, deep in ARFORGEN and working to establish their Knowledge Management program, made it clear to all, who he intended to be KMRs for the KMWG, when he told the primary staff; "Give me the right guy, or I'll take your deputy." In this organization the leadership's support and intent was very clear.

One technique for establishing the KMWG is outlined here. However, keep in mind, that while knowledge integration, shared understanding, organizational learning, and organizational adaptability, in support of Mission Command will be at the core of the KMWGs efforts, you must keep them focused on the Knowledge Management objective: "Getting the right information, to the right people, in the right format, at the right time, in order to arrive at the right decision."

Conduct an organizational meeting. Introduce KMRs to KM (e.g., KM is not the digital tools, but a thought process which supports decision-making and knowledge sharing, which can then be used to identify the appropriate tools), and what it can do for the organization.

Establish the KMWG's responsibilities and expectations early. Indentify who else must be involved with the KMWG, and the KMWG's priorities. Make it clear that the KMWG has been established by the CoS/XO for the purpose of implementing change, and that change will be executed under the authority of the CoS/XO. Share the meeting results with the entire staff in a report or briefing.

It is important that the initial KMWG meeting identify KMWG training requirements. If KMRs or other KM personnel have not had the necessary KM training, the KMO should address this critical gap immediately. They can't implement what they don't understand, and it is likely that some will view KM as synonymous with Information Management (IM), and attempt to deal with tools issues (e.g. managing documents with SharePoint) instead of process issues (the IED working group does not share important decision-making information).

Classes conducted by the AOKM Proponent (as a mobile training team) can solve this gap without much difficulty, and you will want the participation of as much of the KM leadership team as you can manage. Other training problems (addressed in Phase 2) may require more detailed analysis and leadership involvement to implement, as they may require establishing training programs or scheduling training which only occurs periodically.

Training Lesson Learned. The AOKM Proponent's KM Representative Course is the sole means of training KMRs. However, it tends to be a wasted training opportunity for most units. The trend has been for units to throw soldiers into the class at the last minute in order to fill a training quota, instead of executing a KM training plan. This "hey you" approach wastes training resources, and provides little training useful to the unit. A better technique is to establish the KMWG with KMRs selected with the criteria listed in this paper, then schedule the KMR Course with the intent of having the KMRs (and not any available soldier) attend the training.

The initial meeting can also be used to identify which segments of the organization's knowledge processes will be assessed (e.g. battle rhythm), and to develop a plan for that assessment. Some potential topics for an initial KMWG meeting include . . .

- Commander's intent and CoS/XO's guidance for the KM Program;
- Who is responsible for what information, and how does that knowledge flow within the organization;
- The organization's knowledge structure, and the challenges and benefits that structure might present to knowledge integration;
- How do cross-functional teams (e.g. Current Operations Cell) function and how they affect knowledge flow within the organization

The KMRs should leave the first meeting with the assignment of identifying existing knowledge gaps and obstructions for discussion at future KMWG meetings. Some examples include . . .

- Critical information is slowed or stopped before it reaches decision-makers (knowledge gaps).
- Informational inputs for meetings are insufficient or confusing.
- Stored information is difficult to find or inaccessible to others.
- Report formats and processes which hinder sharing information.

The second KMWG meeting can be used to develop an initial list of critical knowledge gaps and potential solutions, and to begin planning for an organizational assessment planning. The initial issues should be simple issues that are easy to implement (such as inconsistent or incompatible report formats). Such issues will give the KMO an opportunity to evaluate how well the KMRs can implement changes, and achieve some quick successes for the KM program.

KMWG meetings should be conducted at regular intervals, as part of the battle rhythm. Follow-on KMWG meetings should be focused on conducting an initial organizational assessment, analyzing the results, and implementing the resulting solutions; and developing and implementing solutions to those issues reported by the KMRs. Start with some easy to fix issues, but stay focused on knowledge sharing processes.

Knowledge Management is not an IT centric process. Care should be taken to focus on the human element of Mission Command in order to get the right information, to the right person, at the right time, to facilitate decision-making.

Phase 2: Developing a KM Program

In Phase 2 (An Easier Way), you will build on the relationships and early successes of Phase 1, in order to establish the KM program as a means to greater efficiency (less time to do the same work) and effectiveness (doing more with the available resources). This phase will require more detailed analysis than the smaller problems tackled in Phase 1, and more work by the Knowledge Management Working Group. Remember, each solution requires its own cycle of the Knowledge Management Process (Assess, Design, Develop, Pilot, Implement).

In Phase 2, you have two objectives: (1) achieve staff and subordinate organization buyin for the KM program, and (2) develop solutions to some of the knowledge gaps your organization is experiencing. Accomplish these objectives by identifying and solving some of the knowledge flow problems (short-term wins) the unit is experiencing. Continue to focus on the knowledge processes required for Mission Command and decision-making.

Begin an Organizational Assessment

Before you reported to your new unit, you conducted an initial assessment, which allowed you to develop an initial implementation plan. Now that you are "on the ground" you can begin the kind of detailed organizational assessment that will allow you to develop a more detailed KM strategy (reread the chapter on assessments in FM 6-01.1 before you begin).

Note that a complete organizational assessment will take some time to complete, and the expectation is that you will begin Phase 3 (as described here) before an assessment is complete. However, you can begin such as assessment, and can make use of some of the results of that assessment, as part of part of Phase 2.

The purpose of this assessment is to identify organizational knowledge gaps in order to establish procedures and processes to close those gaps. Or put another way, to ensure that the right information gets to the right people, in the right format, at the right time in order to arrive at the right decision. Any bottleneck to that knowledge flow is a gap (the difference between perfect knowledge and current knowledge). The end result of an assessment is a list of knowledge gaps, which can then be used to develop solutions to address those gaps.

While it is theoretically possible to assess the complete set of organizational knowledge processes, experience has shown it is more practical to conduct a series of limited assessments; each designed to analyze a specific segment of the organization's knowledge processes (e.g. battle rhythm, meeting management, KM standards and policies, etc). Keep in mind, that early successes will help build momentum for your KM program, and an initial assessment of the organization's battle rhythm has proven a good starting point.

Develop a KM Strategy

Any long-term plan must begin with a concept of operations; in this case, a KM Strategy. This strategy should define the organizations KM vision, goals, and objectives (e.g. developing shared understanding). These objectives can be described in terms of short, mid, and long-term goals, or in terms improvements to decision-making and Mission Command.

This strategy does not necessarily need to be approved by the Commander or the CoS/XO, however, an in-depth discussion with the CoS/XO or KMWG would probably be useful. Instead, it should be a means for the KMO to define and describe an intended path from short-term accomplishments to long term success. This plan will be changed often over time, but will prove useful in implementing the suggestions in this handbook.

Assess the Organization's Battle Rhythm

An organization's battle rhythm consists of meetings, briefings, and other events synchronized in time and purpose. The battle rhythm is the primary means for the unit to synchronize the collection, analysis, and presentation of information for decision-making. A battle rhythm that fails to provide critical decision-making information in a timely and presentable manner, hinders Mission Command and decision-making.

Begin by observing the organization's battle rhythm, how decisions are made, and how the information required for those decisions flows through the battle rhythm events. Lay the battle rhythm out as established (weekly, monthly, etc), and conduct an analysis of the meetings and events. Identify the inputs (information required) decisions, and outputs (information provided to other meetings and events), for each meeting and event. In other words, identify the knowledge flow required for these meetings and events. Likely, this will require interviewing those involved in each meeting and event, especially the decision-makers. Developing a knowledge map is sometimes a useful technique.



Targeting Knowledge Flow Assessment Decisions: Targets to be attacked Inputs: Confirmed targets from Intel WG and available assets from Fires WG Output: Targeting recommendations to Targeting Board

Figure 5. Example Battle Rhythm Analysis

Battle Rhythm TTP. A good technique to begin your Battle Rhythm analysis, is to analyze completely one sequence of knowledge flow (such as the Targeting knowledge flow), instead of taking on the entire organizational battle rhythm. Identify the WGs and boards inputs and outputs, and resulting decisions. Analyze the flow of information and how the meetings are conducted (you will have to sit in to do this). Identify the critical information flow with a view to determining if that working group is meeting its information objectives.

Battle rhythm changes will affect the entire organization and should be approved by the CoS/XO. Make changes to the battle rhythm incrementally, in order to alleviate disruption in routines, identify how the changes affect other battle rhythm events, and to ensure the battle rhythm remains nested with that of higher headquarters. Battle rhythm changes that improve understanding, and require less time for the same work, will demonstrate the usefulness of the KM program and garner further support.

Assess Working Groups and Boards. Each working group and board has specific information requirements (inputs) and specific results (outputs) which must directly contribute to the organization's mission command process. Analyze each working group and board in order to determine whether the required inputs and outputs are with other working groups and boards.

In the above example, in order for the Targeting Board to make timely targeting decisions, the Intel and Fires Working Groups must meet before the Targeting Working Group, which in turn must meet before the Targeting Board. Any other sequence of events will not produce the required decisions. Consider the following in your analysis . . .

- Outputs and inputs of each working group should be clearly identified at each meeting.
- Each Working Group and Board should produce an executive summary for each meeting, in order to share results and to assess effectiveness (use a simple format, such as Issue, Discussion and Recommendations).
- Assess parallel planning between cross-functional cells (if everything has to stop to wait on the results of a core planning group, there is no parallel planning occurring).
- Analyze information stovepipes in order to mitigate or eliminate them.

Improve Meeting Management. Every meeting should have a clearly identified purpose, agenda, participant roster, and identified inputs and outputs. Meetings should also be synchronized with other meetings and events in the organization's battle rhythm. When meetings are conducted properly, there is less wasted time. In some instances, you may find that meetings are taking place in the wrong sequence or that some meetings are duplicative and can be eliminated.

Meeting TTP. A good technique for analyzing meetings is the "7 Minute Drill," as described in FM 6-01.1. The 7 Minute Drill (borrowing a term from sports) is a way to ensure meetings are needed and useful. Each meeting lead presents a Quad Chart (see Quad Chart TTP below) to the CoS/XO, which explains the meeting's purpose, attendees and how it supports decision-making, generally within 7 minutes. The Quad Charts, approved by the CoS/XO are used later to assess meeting effectiveness and to ensure it is accomplishing its intended purpose. When approved by the CoS/XO, effective use of the 7 Minute Drill, synchronized meetings, and prevents arbitrary changes.

Leaders must prepare for meetings and organize content in order to prevent them from floundering or wasting time. They must also ensure there is a means to evaluate the effectiveness of each meeting; such as and Executive Summary (EXSUM) with issues, discussion, and recommendations to ensure the meeting is meeting it established objectives. More detailed information about effective meetings can be found in FM 6-01.1, Chapter 3.

Efficient conduct of meetings is essential to ensuring the information presented becomes knowledge and shared understanding. In order for the knowledge to flow, participants must take ownership of the inputs and outputs they have responsible for. Consider the following ...

- Is there a clear purpose to the meeting (analyze for context and purpose)?
- Do meetings feed each other and ultimately lead to timely decisions?
- Are the inputs and outputs of meetings identified and synchronized?
- Are the meetings deliverables identified in advance?
- Is there sufficient time for those involved to prepare?
- Are meetings structured and conducted to support each other (information flow)?
- Are there duplicative meetings that can be eliminated?

Meeting TTP. A proven technique for managing meetings is the use of a quadchart, depicting specific inputs, outputs, and required attendees (and other information as shown in FM 6.01-1), which keeps the meeting focused, and ensures the right people attend; (2) specified formats for inputs and outputs (in order to ensure the right information is available, and required information is forwarded, as required; (3) an executive summary, forwarded to the leadership and other meeting leaders (keeping everyone informed).

Develop a Pilot Content Management Plan

Content Management tends to be a continuing problem in every organization. Fast flowing knowledge supports Mission Command only when it can be quickly and easily accessed. That is dependent on developing a good Content Management plan, and training people in those procedures.

Start with a content analysis. Analyze the information being stored (knowledge content), how it is being stored, who is storing the information, and who is accessing the information. Consider visibility and accessibility of the organization's knowledge products, which uses the content, how it is stored, and how it is accessed. The objective is to make accessing the decision-making and planning information fast and efficient. Consider the following in your analysis . . .

- What decisions must be made, and what information is necessary to make those decisions?
- Who uses the content and for what purpose?
- What are the inputs and outputs that feed those decisions?
- Who created the content and who is or is responsible for updating and deleting it?
- Where the content will be stored and what format will be used?

Based upon that analysis, develop a Content Management Plan, which defines standards, processes, and roles for the organization as a whole, staff sections, and subordinate organizations. Include in this plan training requirements on those processes and standards for the entire organization. Standardized practices provide the means to share knowledge more efficiently and make knowledge integration routine. This plan should include, as a minimum . . .

- A file naming standard or taxonomy.
- Standardized procedures for storing and sharing the content.
- Standardized templates and forms for common reports can be useful in recording information with minimal effort.
- Procedures for dealing with obsolescent and out of date content (Archiving Procedures).
- Each section should have its own Content Manager, responsible for implementation and execution of the plan.

In order to fully implement this plan, it will be necessary to have it approved by the CoS/XO in some formal document (e.g. a working SOP or policy letter), as it will require the authority of the CoS/XO to enforce those standards and processes.

Once content management standards and processes have been implemented, it will be necessary to assess that implementation, in order to determine identify processes or standards which are unsuccessful, and the level of compliance. What you are implementing is a pilot Content Management Plan, which will eventually become part of the Knowledge Management SOP.

Develop a file structure taxonomy. A basic concept of Content Management is the development of a standardized naming scheme (taxonomy) for files. If six months of a monthly report have six different names, the files will be hard to find and use. However, if those same six reports had a standardized nomenclature, they would be easier to find, and more efficient to use.

Report	Individualized Report Names	Taxonomic Report Names
Status Report, Jan	STATREP 2012-11-01.docx	1AD_Status_Report_2012_Jan.docx
2012		
Status Report, Feb	Report, Status, 2012, Feb,	1AD_Status_Report_2012_Feb.docx
2012	11.doc	
Status Report, Mar	Sullivan's Report for	1AD_Status_Report_2012_Mar.docx
2012	March.docx	
Status Report, Apr	CoS Status Report this	1AD_Status_Report_2012_Apr.docx
2012	Month.docx	
Status Report, Jun	SITREP 11012012.txt	1AD_Status_Report_2012_May.docx
2012		
Status Report, Jul	My Report V12 with extra	1AD_Status_Report_2012_Jun.docx
2012	notes.pdf	

Example of File Taxonomy/Naming Convention

Improve Organizational Collaboration

Analyze collaboration tools. Another area commonly deficient in Army organizations is the use of collaborative tools. Collaboration is a basic element of staff work, and can directly affect organizational decision-making.

Commanders tend to prefer to communicate to their staff and subordinate leaders through voice, which makes this a good starting point. A commander speaking directly to soldiers can communicate a clear intent and get instantaneous feedback. Look for ways to improve such collaboration.

Collaboration TTP. Adobe Connect (Defense Connect Online) is one means of improving collaboration between leaders and staff, without requiring them to gather at one location. This could be piloted during a practice battle drill as a quick means of keeping the leadership informed and helping to establish standards used through the voice communication tools.

SharePoint is the enterprise solution for the Army, and soldiers must understand the basics of this tool. The organization must establish clear standards for storing, sorting, and retrieving information from its SharePoint site. SharePoint can be both a collaborative tool, and a content management tool, that can provide great capability if used to its full potential.

SharePoint TTP. One effective method of employing SharePoint is to brief directly from information on the SharePoint site. This eliminates the time expensive requirement of converting documents and information stored on SharePoint into PowerPoint slides and other format changes (adhering to the KM rule of thumb of "Type it only once").

Analyze email practices and standards. Email should not be the primary means of communication or collaboration, as it builds stovepipes and provides no means to verify a message was received or understood. Dependence on email for collaboration inhibits information sharing and collaboration. Analyze your organizations use of email, and develop procedures (e. g. collaborating on documents with SharePoint) to eliminate dependence on email.

Email TTP. A technique which has been successful in pushing organizations away from transferring large documents through email (using up a lot of bandwidth, and limiting sharing of information) is to prohibit the practice entirely. When people get used to uploading documents to a SharePoint, or similar website, the use of email is reduced, available band-width is increased, and knowledge sharing is enhanced.

Develop a KM Training Plan

Every unit, especially in the early stages of ARFORGEN, experiences problems with untrained or incompletely trained solders. This will be especially true when it comes to knowledge management. Though some training problems will require long-term solutions, many can be dealt with much more quickly. In Phase 1, you developed training requirements for the KMO and KMRs; in this phase you must develop training for the staff and soldiers who will be implementing the KM plan across the organization. This training will also be coordinated with the G3/G6.

An important part of this training plan will be training in the primary Mission Command systems (CPOF, DCGS-A, AFTADS, BCS3, etc.). These systems are often used as a primary collaboration means, and generally require significant training programs within the unit to maintain effectiveness. Understanding how these systems process information and how they are used to inform and collaborate is critical to the KM Program. Training on these systems should be established through the G3/G6.

Phase 3: Long-Term Success

In Phase 3 (Mission Success), you will build the KM program you have established into an integral part of the unit's Mission Command and decision-making processes. Accomplish this with long-term, detailed assessments of the organization, which are then developed into longterm improvements to the units decision-making and knowledge flow processes. There is no end to this phase, and it will require a lot of detailed staff work.

In Phase 3, you have one long-term objective: develop the policies and procedures that will convert your KM program from a short-term success into a long-term, integral part, of the organization's decision-making process. Accomplish this objective with a detailed assessment of how your KM program affects your unit's staff and decision-making processes throughout the ARFORGEN process.

Improve the Organization's Digital Communications

Eventually, every KMO will have to deal with the "KM vs. IM" struggle, which can sometimes become a contest. However, if the KMO focuses on improving the organization's information flow processes, the organization's information management professionals can be enlisted into supporting those processes with the appropriate digital systems.

Begin by understanding the digital systems that are used to transfer information, and how they interoperate. Knowing how each system works and how to work them, should not be the KMO's focus. That is for the G6. Instead understand how information is supposed to flow and try to identify and fix obstructions to that information flow.

Consider these aspects of digital systems in an organization's information flow

- How does information flow in the different networks?
- Are there too many networks; can they be streamlined?
- What are the critical systems? Is there redundancy for these systems?
- What are the most effective means to disseminate information to leaders, staff, and subordinates?
- What are the constraints imposed by classification of information?
- Are there enough Foreign Disclosure Officers (FDOs) to help alleviate the bottlenecks created by the classification of information? Leaders are responsible for assuming risk on the classification of information not the FDOs.
- Is everything written at an unclassified level unless absolutely necessary?

Develop a KM SOP

Establishing a KM program requires developing a set of standardized practices and procedures, which can be used to train leaders and staff. The standardized practice for accomplishing that within the Army is a Standard Operating Procedures (SOP). Keep in mind the KM process (Assess, Design, Develop, Pilot, Implement) as you develop and implement this SOP (some of which will have been started or completed in earlier phases).

The KM SOP should be as comprehensive as possible, defining the organizations KM objectives (e.g. developing shared understanding) and procedures, and incorporating all elements of knowledge management. Specific items to address in a KM SOP include . . .

- Individual and collective responsibilities; roles and duties of the KMO and KM Section;
- Responsibilities and procedures for the KMWG and KMRs;
- KM in the organization's battle rhythm, and meeting procedures;
- Knowledge products, and Content Management, file taxonomy, and meta-data requirements;
- Use of SharePoint, and other collaboration methods; and digital systems

Reassess Content Management. Content management is one of the key areas that knowledge professionals will have quick wins to show knowledge management worth, if done properly. Content management is always an issue in an organization. Most organizations have too many systems, networks, programs, databases, etc.

At this point content management should have been piloted and this is the time to reassess the initial content management solutions. Most of the solutions should have been simple solutions, like naming conventions, identification of the areas to publish orders, reports, findings, and after action reviews. Additionally, the crosswalk of the orders process will have driven changes to the content management rules.

Design and Develop content management rules and practices. Knowledge integration depends on understanding how knowledge should be stored (where and in what format), and how it can be retrieved. In order for most processes to happen there needs to be a clear understanding of how to use the tools that store knowledge. This is one of the hardest tasks associated with knowledge management.

Capture content management standards in the KM SOP. The SOP should be written in a collaborative environment with input from the Information Management personnel, operations personnel, plans personnel, and all the primary staff representatives.

The KM SOP should include procedures for changing the SOP, and planned, periodic updates (at least annually, more often in the early stages of an organization's KM program), in order to ensure it remains relevant to the operational process.

Designing Knowledge Management Solutions

No document on implementing Knowledge Management can be all inclusive, and a part of any long-term implementation plan must consider of a variety of topics. Keeping in mind the KM Process (Assess, Design, Develop, Pilot, Implement), here are some other subjects for consideration in a long-term KM program.

Assess KM in the Operations Process. One of the most important aspects of Mission Command is how the organization implements the Operations Process and the Military Decision Making Process (MDMP). Though not all inclusive, some considerations for KM in these processes include . . .

- Receipt of mission. Analyzing how missions are received and how those missions are processed will help identify organizational knowledge gaps. Attempt to indentify bottlenecks to knowledge flow that inhibits the orders process. Identify where information stored and how it is retrieved. Analyze the collaborative processes involved in MDMP.
- Issue of orders. Analyze the collaborative processes involved in writing and issuing Warning Orders and Operations Orders. Determine if parallel planning processes are standardized, and identify how information is stored and shared throughout the planning process. Analyze how orders are published, and in what format.
- Execution of Orders. Assess how battle handover is conducted, and how plans move to current operations. Assess the collaborative means to execute battle drills, and how leaders are kept informed. Analyze reports, and how they are stored and shared.
- After action assessment. Lessons learned are essential in ensuring there is learning within an organization; however lessons-learned can become lessons-not-learned without a method to integrate them into the organizations knowledge processes. Assess how AAR products are generated and how they are stored and shared. Identify which databases, personal information, reports, etc. are needed to establish effectiveness of an operation. Analysis measures of performance and effectiveness (number of combat patrols conducted daily is a poor measure of effectiveness).

Common Operating Picture. Common Operating Pictures (COPs) are usually not common or even have similar displays. If the COP is intended to facilitate a shared understanding, training and standards should to be established. Some COP considerations include. . .

- What is the COP? Is it the display from a certain tool? Is it a map with overlays and pushpins? Is the COP the CCIR with the answers identified?
- What is the common information that should be displayed in every COP among the organization?

Some Final Thoughts

If, as recommended, you have read FM 6-01.1 before beginning this handbook, you would have noticed, this handbook has dealt with only a small portion of the missions and tasks a KMO might expect to deal with. The objective has not been to provide a detailed, step-by-step manual of how to implement Knowledge Management in an Army organization, but to deal with the most common situation of being assigned as a KMO, with little or no warning.

As such, this handbook is rather limited in scope. It has been written with the understanding that, as Knowledge Management progresses in the Army, better sets of TTPs will be developed, probably rendering this handbook obsolete in the near future.

As the KMO for a major Army organization you will be directly involved in improving the knowledge processes in that organization, and responsible for implementing the necessary changes. As you develop those processes, and implement those changes, you will be developing the very TTPs likely to render this handbook obsolete.

As Army Knowledge Professionals, you have the responsibility of sharing those lessons you learn with the rest of the Army. The best way to do that is to record them and report them to the AOKM Proponent office.

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