Strategy Research Project

CREATING A KNOWLEDGE MANAGEMENT STRATEGY

BY

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USAWC STRATEGY RESEARCH PROJECT

CREATING A KNOWLEDGE MANAGEMENT STRATEGY

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ABSTRACT

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The Army needs to reaffirm Knowledge Management as the means to supporting its Army's Strategic Strategy for the 21st Century of transforming itself into a network-centric knowledge-based force. The best way to do this is for the Army to write an Army Knowledge Management Strategy that lays out a vision to shape the entire Army into a knowledge-based force for the next twenty or thirty years. The strategy would provide a unity of effort for the Army enterprise, which is currently operating piece meal. With a common Knowledge Management strategy, the Army would direct TRADOC in coordination with FORSCOM to develop a plan to change the current cultural mindset and Army doctrine to meet its strategic goals. The forces would affirm these newly developed Knowledge Management processes through daily use, training and exercises. HQDA G6/CIO, who is responsible for the Information Management strategy, would tailor the Information technology resources operating the enterprise appropriately to support the Knowledge Management strategy.

CREATING A KNOWLEDGE MANAGEMENT STRATEGY

> This knowledge initiative is not a culture change project. It's just that our culture is in the way of what we want to do, so we've got to change the culture.
>
> — knowledge manager,
> manufacturing company[1]

The purpose of this paper is to support the creation of an overarching Army Knowledge Management (KM) strategy as the Army enterprise continues to transform itself into a network-centric knowledge-based force. The analysis will include:

- The need for an Army KM strategy
- An historical analysis of Army KM efforts to date, including a review of the success of those efforts
- A review of current KM regulation and doctrine
- A plan to make KM successful
- Responsibility for KM
- Linking KM with Information Management (IM)

The Need for an Army Knowledge Management Strategy

Our key military strategy documents describe KM as our future organization. The current National Defense Strategy (2005) expects to fight a full spectrum of warfare defined as Traditional, Irregular, Catastrophic, and Disruptive.[2] The Secretary of Defense plans to meet this full spectrum challenge by transforming the military into a knowledge-based organization.

The last Quadrennial Defense Review (QDR) Report (2006) discusses reshaping and reorienting the force to support knowledge-based organizations using a net-centric

enterprise for moving information. The QDR vision is the ability to take data and information from the various services' IM systems to produce improved accurate, timely, and usable knowledge shared by all the services. The timely sharing of data and information and knowledge creates the synergy necessary to defeat our adversaries, obtain our goals, and complete our mission.[3]

The Secretary of Defense's National Military Strategy (2008) stated, "The goal is to break down barriers and transform industrial-era organizational structures into an information and knowledge-based enterprise. These concepts are not a panacea, and will require investments in people as much as in technology to realize the full potential of these initiatives."[4]

Since the Army does not have an overarching strategy, it currently conducts KM on an ad hoc and sporadic basis. There is not a unified KM proponent who can orchestrate a clear and cohesive KM strategy to ensure the ultimate end-goals are being met. This has created unnecessary friction points and impedes our unity of purpose. We have gaps and overlaps in our capability causing knowledge to be lost, hard to find, slow to absorb, competed for ownership and a waste of energy and resources. Many people, including some of our current senior leaders, think KM is accessing information within two clicks of a mouse and that it is a civilian employee's concern.[5]

An Historical Analysis

On August 1, 2001, then Army Chief of Staff General Shinseki signed the first Army Knowledge Management memorandum (AKM). The memorandum stated that KM

would be the Army's strategy for transforming the Army into a network-centric knowledge-based force. The strategic plan had five goals:

1. Adopt governance and cultural changes to become a knowledge-based organization.
2. Integrate KM and best business practices into Army processes.
3. Manage the infostructure at the enterprise level.
4. Scale Army Knowledge Online (AKO) at the enterprise portal.
5. Harness human capital for knowledge organization.[6]

Let us look at each one of these goals in more detail and determine whether or not they have been successful.

Goal 1. Adopt governance and cultural changes to become a knowledge-based organization. The first goal stated that a new policy needed to be in place to manage Information Technology (IT) at the enterprise level effective October 2001. The Army Chief Information Officer (CIO) would establish an executive board to review future IT initiatives. Previously, each major command (MACOM) could budget and purchase their own IT. There was no governance oversight. Several problems occurred with each MACOM controlling their own IT investments. The first was interoperability. For example, each MACOM purchased the appropriate hardware and software for servers, data storage, computers, leased circuits, video teleconferencing (VTC) equipment, and clerical office software. This resulted in stovepipe communications equipment to support each MACOM and their subordinate commands. Different MACOMs were not able to communicate with each other unless they bought the same brand of equipment and in

some cases model. Because there were no architectural standards across the Army, each MACOM and subordinate organization developed its own architecture standards.

In addition, the Army was not able to leverage from the vendor a lower cost per item because the Army was not buying on a large scale. Each unit was allowed to budget and purchase their own computers and equipment and establish their own contracts and warranties. Eventually, MACOMs consolidated some IT contracts. HQDA CIO/G6 developed architecture standards and established Army wide IT vendor contractors. The Army directed organizations to purchase hardware and software from the lists of vendor contracts. It was not an easy task to tell MACOMs what they could and could not buy, but the majority of organizations complied and the process became institutionalized over time.

This goal evolved into what the Department of Defense and Army calls IT Portfolio Management (PfM). PfM bins all IT investments into categories and domains like logistics or Core Enterprise Services. Each domain has a board that oversees these investments to ensure interoperability and eliminate duplicity. There is an overall board chaired by HQDA CIO, G8, G3, and Finance that establishes direction, policy, and goals. The Army allowed organizations to submit exceptions under the Goal 1 waiver to be exempt from the process.

The Army achieved the governance portion of the first goal by organizing the Army into an enterprise for IT, and it established a process to oversee all IT investments. However, culturally the Army did not change to a knowledge-based organization. Some small changes took place to lead toward an enterprise organization

but as later examples show, Army Major Subordinate Commands (MSC) still think independently, and KM is regulated as a CIO (technology) focused event.

Goal 2. Integrate Knowledge Management and Best Business Practices into Army Processes. The second goal was to integrate KM and best business practices into Army processes. The intent of this goal was to improve information sharing through collaboration and any other innovative IT methods. Goal 2 directed the field to provide a list of their KM initiatives so the Army could apply these good ideas across the entire Army enterprise and eliminate where there was a duplicate capability, resulting in cost avoidance to the Army. The results were a database of IT applications such as rudimentary instant messaging, VTC, and other collaborative tools. The feedback provided HQDA CIO/G6 with an understanding of what the Army was using or not using.

The Army met Goal 2 at the rudimentary level, but it fights a continuous battle to keep track of the investments, as MACOMs continue to purchase new technology. As the IT industry creates new ways to collaborate, society and business adapts, and so does the Army. The Army is on its way to manage the IT enterprise centrally--a step towards becoming net-centric.

Goal 3. Manage the Infostructure at the Enterprise Level. This goal required the Army to designate a single authority to operate and manage the Army's infostructure at the enterprise level. The Army designated the CIO/G6 as the single authority. Each MACOM created a CIO position responsible for the management of their portion of the infostructure (Army enterprise).

The Army met this goal with the result that the entire Army enterprise is under one general officer. There is a hierarchy with a general officer responsible for every single part of the Army enterprise. The mindset of standalone networks is gone.

Goal 4. Scale Army Knowledge Online (AKO) at the Enterprise Portal. Historically, every MACOM operated its own enterprise. Most organizations that could afford the IT infrastructure had its own web sites, unique email server, email addresses, and VTC network. The ability to find information from different parts of the enterprise was difficult and not transparent. Goal 4 wanted Soldiers to go to one location to find all the information to do their job. Many legacy applications were not accessible via a web interface. Organizations had to decide to pay to create the interface or abandon the legacy system and start fresh with a new application that may not import data already in the legacy system. Every Soldier would receive a unique AKO identification (email address). This would eliminate the labor and email server equipment at the local level.

The Army partially achieved this goal. Every Soldier has an AKO account, but MACOMs are still running a separate email server with the Soldier's AKO address linked to their local address. In mid 2005, NETCOM started phasing in single Global Address Lists under Enterprise Directory Services (EDS-Lite).[7] Some MACOMs like Army Material Command have webified their systems and put them behind the AKO portal, but many systems are still not behind the AKO portal.[8]

Goal 5. Harness Human Capital for the Knowledge Organization. This objective was to gather all the good ideas for reshaping the workforce into a network-centric, knowledge-based force in support of the military and civilian financial and personnel management programs. One initiative was the creation of Defense Integrated Military

Human Resources System (DIMHRS) program. DIMHRS was defined in AKM memorandum number 3 (see below). This goal is so challenging, the DOD still has not fielded DIMHRS.

The Army has four more AKM memoranda. General Shinseki signed the second one on June 19, 2002, which directed the Army to consolidate IT servers as a means of better management, cost savings, and labor.[9] The Army had enormous amounts of servers across the enterprise. This was a primary result of each Army Acquisition program fielding its own unique server. This goal was extremely successful--large dedicated buildings were reduced to rooms, there was less maintenance and energy consumption. Also future acquisitions must take into consideration existing available server space.

Then on March 3, 2003, General Shinseki signed the third AKM memorandum to specifically create a network-centric enterprise personnel management system--DIMHRS.[10] As mentioned above, the Army has delayed the implementation of DIMHRS. General Keane (then Acting Chief of Staff) signed the fourth AKM memorandum July 15, 2003 directing a network-centric logistics system.[11] General Schoomaker (then Chief of Staff) signed a fifth AKM memorandum establishing a training network-centric enterprise system on September 7, 2004.[12] The Army has not implemented any of these enterprise programs.[13]

All five AKM Memoranda focused on replacing the current way of doing business with a net-centric IT process, which provides leadership and management an enterprise means of producing reports and statistics without having to ask the subordinate

organization for the information. As we have seen above, the Army has only been partially successful in implementing these goals.

A Review of Current Knowledge Management Regulation and Doctrine

The Army has several definitions of KM in regulation and doctrine. The first attempt to codify KM is Army Regulation 25-1 written in 2005. The regulation states Army KM is the Army's strategy to transform itself into a net-centric, knowledge-based force and an integral part of the Army's transformation to achieve the Future Force. Army KM will deliver improved information access and sharing while providing "infostructure" capabilities across the Army so that warfighters and business stewards can act quickly and decisively. The regulation also says that Army KM connects people, knowledge, and technologies.[14] AR 25-'s definition needs refreshing. The regulation's definition of KM doesn't deliver improved information. The regulation delivers an improved process of obtaining information that is more timely, accurate, and relevant to the user who needs it. Also KM should be the result of people, process and technology which results in knowledge.

Army Field Manual 6-22, Leadership (2006) states KM is the Army Transformation Strategy—a cultural change in the way our Army thinks and conducts business and operations.[15] This is a good vision statement for the overarching KM strategy but as a field manual does not provide the how-to execute piece. Army leadership development must integrate KM into its tenets of Education, Training and Experiences.[16] This field manual must show how KM is the way for the new adaptive Agile Leader Mindset way of thinking.

Army Field Manual 3-0, Operations (2008) defines KM as the art of creating, organizing, applying, and transferring knowledge to facilitate situational understanding and decision-making. KM supports improving organizational learning, innovation, and performance. KM processes ensure that knowledge products and services are relevant, accurate, timely, and useable to commanders and decision makers. The field manual also defines KM as the art of gaining and applying information throughout the Army and across the Joint Force.[17] The KM process applies to every Soldier and civilian. KM also does not just apply to the operational level. This field manual needs to show the KM linkage to the rest of the enterprise.

Then, in June 2008 the Department of the Army Headquarters (DAHQ) Chief Information Officer/G6 (CIO/G6) released the Army Knowledge Management Principles.[18] Its definition of KM is a discipline that promotes an integrated approach to identifying, retrieving, evaluating, and sharing an enterprise's tacit and explicit knowledge assets to meet mission objectives. The objective of the principles is to connect those who know with those who need to know (know-why, know-what, know-who, and know-how) by leveraging knowledge transfers from one-to-many across the Global Army Enterprise.

The 12 principles are organized around three main tenets: people/culture, process, and technology working together to facilitate knowledge sharing. However, the principles under the tenets reads more a like a checklist that MACOMs, Knowledge Managers and the IT staff need to know or take into consideration when developing their KM strategies. These principles are important but better fit under the how to

execute and operate. The Knowledge Manager should incorporate the tenets into their organization's strategy.

In addition, in August 2008, under the direction of Army Headquarters G3, TRADOC via the Combined Arms Center produced Army Field Manual FM 6-0.01 on Knowledge Management that describes the KM process for a unit-Brigade Combat Team, Division, or Corps. The manual goes on to tell us how to gather information and turn it into knowledge, from tacit to implicit, but there is no discussion of how the institutional part of the Army leverages the knowledge to share with other divisions, corps, or the rest of the Army or fellow services.[19]

In creating an overarching strategy, Army Field Manual 6-01.1 can be the document focusing on the operating force internally. Another volume needs to focus KM as it relates to the institutional and generating force. It is critical that Knowledge flows freely and fluidly back and forth between the institution, generating, and operating forces. How many times have we heard, "If we would have known we would have trained for this action?" As tactics change on the battlefield to combat the enemy, the institution and operating force must incorporate timely changes in the training of the deploying Soldiers. Granted what works in one village in Iraq may not work in another or in Afghanistan, but it provides knowledge to consider and apply where you are on the battlefield. However, this update in training must be quick. Information and knowledge from the battlefield must reach back to the institution so a more permanent solution (acquisition and doctrine) can be developed and then applied across the force as required. This field manual and Field Manual 3-0 needs to incorporate this dynamic relationship of the various parts of the enterprise.

There must be a trust relationship between the institution and the operating force that both parties are working together as one team for the same cause. In the Tom Hanks' *Apollo 13* movie, the Apollo 13 crew trusted their lives with the ground crew. They believed the ground crew provided instructions for their survival when the spaceship malfunctioned. They could trust because one of their own was on the ground crew. At the institutional level, there are people that were in the field who lived and experienced what the operating force is currently living. The institution tries to capture the explicit knowledge from the battlefield making it available for others today and in the future. However, Soldiers and civilians need to be aware that the field evolves. For instance, what a Soldier experienced in Iraq in 2003 is not necessarily the same experience or environment in 2009. Users of the knowledge must analyze and interpret the information and apply it to their situations.

A Plan for a Successful Knowledge Management Strategy

In order for the KM strategy to be successful, it has to go beyond the organization or its leader. The vision must be intrinsic. To share the same vision you and I have to have a similar picture and commit to one another as having the same vision. A shared vision is one that many people are truly committed to because it reflects their own personal vision. A shared vision is not an idea, even an important one such as freedom. It is, rather, a force in people's hearts, a force of impressive power. An idea may inspire the vision, but once it goes further--if it is compelling enough to acquire the support of more than one person--then it is no longer an abstraction. People begin to see it as if it exists.[20] This is art versus science, no different from a building architect and a developer.

To create this vision, the Army must develop a new strategy. The KM strategy should include the Army Knowledge Management Principles' three tenets. These three components are: *(1) the work processes or activities that create and leverage organizational knowledge; (2) a technology infrastructure to support knowledge capture, transfer, and use; and (3) behavioral norms and practices--often-labeled "organizational culture"--that are essential to effective knowledge use.*[21]

Even though the cost incentives are clear and technological capabilities exist today to support a knowledge-based military, pioneers in KM are finding that the behavior supported by their existing organizational culture is a major barrier to this transformation. The premise is that organizational knowledge and culture link together closely, and that improvements in how the military creates, transfers, and applies knowledge are rarely possible without simultaneously altering the culture to support new behaviors.[22]

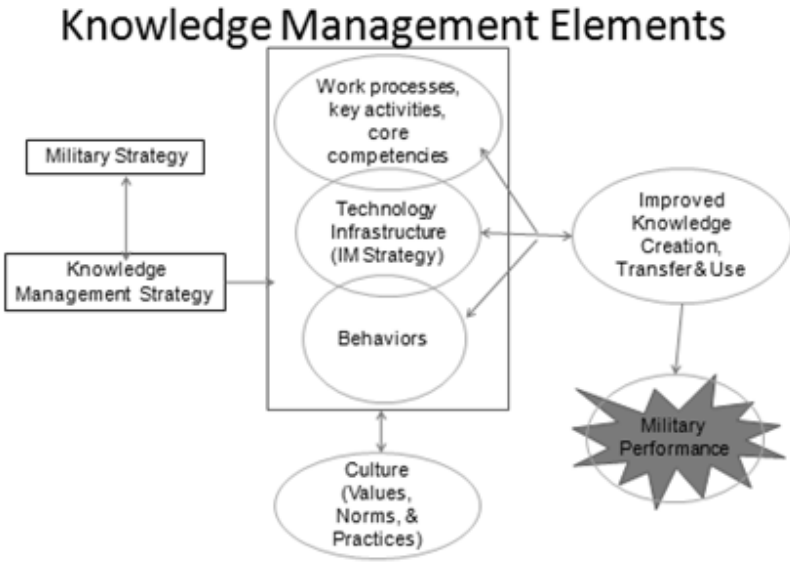

Figure 1:

The Army has to change its cultural mindset in order for KM to succeed. The old and current belief is that Knowledge is power and to have power is to keep and not share knowledge; to share knowledge is to lose power. For example, I am the only one who knows how to set up an exercise in a foreign country because I know who the key individuals are for approval, and I don't share this information. I become very important to the success of that exercise.

Currently some leaders are changing this paradigm by empowering their Soldiers at all levels to take and analyze information and to share the results of their knowledge with those who need to know in order to have rapid decisions on the battlefield. The idea of running the information up the chain of command for analysis and approval and then back down the chain or across to another service or agency for action is not responsive enough to stop a cunning and elusive enemy. The process of developing critical thinking in Soldiers is called the Agile Leader Mindset. [23] Field Manual 6-22, Army Leadership defines it as leaders communicating more effectively with informal networks than directly with their superiors.[24]The Agile Leader Mindset needs to be embedded into institutional training processes as part of the KM strategy on changing corporate culture and behavior.

KM must also link to the organization's objectives, which is our military national strategy. Increasing knowledge or creating knowledge processes does not improve the organization's performance. For example, converting and storing vast amounts of information from print to electronic form does not advance our national interest, if no one uses it to that effect. Also, adding more processes and IT infrastructure does not improve the organization. Designing and paying for a unique search engine when

people ignore it and use a free off-the-shelf product (like GOOGLE) is a waste of time and money.

Moreover, the Army KM strategy must satisfy these four major criteria in order to succeed. The four criteria are:

1. *Globalization of the enterprise.* The Army and business are multisite, multilingual, and multicultural in nature. Knowledge has to pass transparently between all these natures in a timely and effective manner. Technology is the solution for this criterion. However, there is the risk of automated misinterpretation in the translation between foreign cultures and languages. Cultural awareness and language familiarity training for Soldiers will also mitigate this criterion.
2. *Leaner organizations.* The Army and business are doing more with fewer resources. The Army must conduct due diligence and reduce unnecessary overlaps of people, processes, and technology. The IT resources (means) must use economies of scale for IT purchases. However, it is not just about the money. Changing our Army culture and our way of thinking can meet these criteria by using common enterprise systems. Leaders must trust fellow leaders and share common IT technology across organizations. The Army must be more of a family in nature and eat from one rice bowl. While not everyone eats the same amount, the family ensures no one goes hungry.
3. *Corporate amnesia*. The work force is mobile and therefore knowledge continuity is lost as people transition organizations. The Army experiences this consistently with Permanent Change of Station moves. Many times one

has felt that they are creating processes and procedures for the first time, i.e. reinventing the wheel. In order to satisfy this criterion, time must be set aside for education and training in the schedule. Access to knowledge via a portal/collaborative tool to do the research is necessary. The Knowledge Manager is like a librarian who can help the researcher in their search using the various search engines. Leadership must demand unit discipline and the time to research the material, properly format and note the training presentation, and place it back into the archive on the portal.

4. *Technological Advances.* Technology improvements allow the transfer of information to increase exponentially. This raises people's expectations to be continuously connected to the network with an immediate response that otherwise may have occurred days or months later allowing time for a person to absorb the information and convert it to knowledge. Technological advances can lead to information overload. This makes decision making even harder by trying to decide what information is important and relevant. The technological advances have to support the management of knowledge.[25] The advances must improve the performance of know-why, know-what, know-who, and know-how.[26] KM is not managing the technological changes. IM is responsible for incorporating technological changes that improve the organization's knowledge. Soldiers need formal education at all levels of professional development on how to critically, systematically and creatively make decisions from the information.

A simple vision and clear definition of what knowledge processes are is critical for the Army.[27] Therefore, the strategy must address two areas: *(1) codification that connects people through explicit knowledge of reports and documents, and (2) personalization of implicit knowledge such as email, video conferencing, and Voice over IP*. They are both equally important and needed; however, the Army must balance them in order of priorities. Often Soldiers communicate knowledge more effectively with informal networks than directly with superiors.[28]

The strategy must be flexible to allow for these informal networks to exist. Soldiers must use them in conjunction with formal exchanges of knowledge like briefings and reports. Leaders must foster these informal exchanges of knowledge. Technologies like collaborative tools (Defense Connect Online), SharePoint portal, white board, text messaging, and video can assist with the formal and informal exchange of knowledge. Technology is the tool, not the process or knowledge itself.

Responsibility for Army Knowledge Management Strategy

All of these organizations currently claim some responsibility for Knowledge Management:

- DAHQ CIO/G6's Governance Acquisition & Chief Knowledge Office/Knowledge Management Division
- Corps
- Armies
- Signal Commands
- Directorate of Information Management (DOIM)

- Program Executive Office-Command and Control Communications Tactical (PEO C3T)
- Training and Doctrine Command (TRADOC) organizations and institutions, which include:
    - Defense Technical Information Center
    - Army Heritage and Education Center (AHEC)
    - Center of Military History
    - Combined Arms Center for Lessons Learned
    - Battle Command Knowledge System (BCKS)[29]
    - Army War College
    - centers of excellence

Under a new and organized KM strategic plan, the players implementing KM strategy should be as follows (using a construction analogy): HQDA is the architect, TRADOC is the building developer, HQDA CIO/G6 is the construction company with the Signal organizations, DOIM, and signal brigades as their on-site construction force. The acquisition community (PEO) is the materials provider. Everyone in the enterprise is the occupant/user of the structure with FORSCOM being the homeowner association's representative with the developer and architect.

There must be a unity of purpose. Each organization must not develop their part in a vacuum. All the parts must fit and work together. These organizations must cooperate, leveraging each other's expertise, identifying the knowledge gaps, and changing the Army's cultural mindset. Changing the Army's culture requires a unified senior leadership if the vision is going to succeed. MACOMs must work together as one

team, training with the same process, using the same equipment and software, and coordinating everyone's precious resources.

Linking Knowledge Management with the Information Management Plan

The Army's current KM memos and AR 25-1 are primarily IM based--improving the means of connecting people and systems that have information (data and services) with those who need information.[30] IM focuses on improving the Army enterprise's communication infrastructure reducing its operating and maintenance costs and improving reliability, security, trust, and timeliness. IM does not increase the Soldier's or the organization's knowledge and understanding. Army Knowledge Management Memorandum One did not really provide a vision for managing the Army's knowledge in the 21st century. Furthermore, the memorandum reads more like objectives with specific tasks completed in five calendar quarters. The current Army CIO/G6's 500 Day Plan is the latest version of objectives.[31] These are great objectives under the IM plan, but KM strategy should be a vision that transcends changes in leaders. Unlike the AKM memoranda or the 500-day plan, once the objectives are complete the strategy is complete.

The KM strategy should provide a unity of purpose for the IM plan. Because the KM strategy must satisfy the institutional, generating, and operating forces, the IM plan must also support the entire enterprise. Knowledge must flow through all parts of the enterprise as if it is one body. KM strategy must have the ability to share knowledge vertically or horizontally across the enterprise where it is needed. One of KM's purposes is to provide the Soldiers and civilians a better understanding to make better decisions, whether it is to detain a person at a checkpoint or to approve the funding of a major

capability. In addition, the architecture must be open ended. Everyone must be able to provide input and output to the knowledge process. Everyone is a sensor—a provider of data, information and knowledge—and everyone is a user of data, and information to increase one's knowledge.

There is the misconception that KM is converting implicit knowledge to explicit knowledge, storing the information and making it accessible via a "knowledge portal". It would be as if the Army could simply upload a program into Soldiers' heads like the characters in the movie *The MATRIX.*[32] If Neo and his group wanted to fly a helicopter, they would upload the program with the knowledge they needed to do the task. This is not possible.

The goal to convert all tacit knowledge to implicit knowledge is neither possible nor feasible even with unlimited resources, time, and money.[33] KM is broader and more holistic. It must take into account the value of organizational knowledge and the expertise that accumulates over time. The focus is not on the documents but the user and his or her ability to share knowledge in order for the individual, organizations, units, and institutions to gain a better understanding. One expert said that to conceive of knowledge as a collection of information seems to rob the concept of all of its life. Knowledge resides in the user and not in the collection. How the user reacts to a collection of information is what is important.[34]

It should be up to IM to figure out best how to support KM. KM does not care if the organization centralizes information to a server farm, decentralizes it across the entire enterprise, or encrypts and protects the information (Information Assurance responsibility). What KM cares about is that the material is accessible to the people and

systems that need and can use the data and information to gain understanding. Organizations cannot compartmentalize the information to the point that the knowledge is “lost” and only a select few acquire the knowledge to the detriment of the enterprise. In addition, there is a problem if the information is stored uniquely at different locations. This can lead to multiple sources of the same information evolving differently, each unit storing unique information in their version of the database.

An example of multiple users of the same information is the biometrics database. Users use only one database to confirm an individual’s identity.[35] The intelligence community, force protection, and human resources all need access to the database for different purposes. The KM strategy allows for the shared use of the information. The IM strategy would build the architecture to support it. The KM strategy must provide for the capture, storage, organization, and timely availability to share data, information, and/or knowledge now and in the future. It must support implicit and explicit knowledge and allow knowledge to flow back and forth between types effortlessly. Knowledge and wisdom come from experience. People move and retire; the world changes creating different experiences. We can only apply the knowledge of the past to the future.

KM strategy should be one that promotes the reduction of duplicate information when possible. Multiple locations lead to different evolutions of the material. If the information resides in another system, it needs to be pulled from that source vice recreating the information for each particular system. KM also supports an architecture that allows the ability to pull information from various sources and it should have the ability to change information from one media form to another, for example voice modularity to digital text.

Summary

The Army needs to reaffirm KM as the means to supporting its Army's Strategic Strategy for the 21st Century. The best way to do this is for the Army to write an Army Knowledge Management Strategy that lays out a vision to shape the entire Army into a knowledge-based force for the next twenty or thirty years. Then the Army should direct TRADOC in coordination with FORSCOM to change doctrine (work processes) as required that supports the strategy. FORSCOM through training exercises ensures that the forces use the Knowledge Management processes. HQDA G6/CIO is responsible for the Information Management strategy that supports the Knowledge Management strategy. NETCOM and the Army signal commands in EUCOM, CENTCOM, and PACOM theaters in concert plan and execute this new IM strategy. These actions lead to nested strategies and unified Army Regulations and Field Manuals, including all supporting regulations and guidance memoranda.

Army Knowledge is the Soldier's key weapon platform like the Navy's ship or the Air Force's aircraft. Therefore, the knowledge strategy must hinge upon the concept of being able to share information freely to gain knowledge. It is the ability to take information, analyze it, and project it to users for their use in decision-making. Imagine a fusion center where information around the world flows in and out and where it is evaluated from the various aspects of military operations, understanding not just the immediate but the secondary and third order effects of the action.

Knowledge Management must have the ability to support people, processes, and technology and be flexible to support the Army's overall strategic strategy that has to fulfill the National Strategic Strategy. It must allow for innovation so as technology evolves the knowledge strategy can absorb the new means of communication.

Most importantly, every organization is responsible for the change in Army culture. Knowledge is power and it is incumbent on each one of us to share that knowledge with our fellow professionals in arms for the betterment of the Soldier and Army. Everyone has to be on board with the cultural change.[36]

Endnotes

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