

THE MILITARY PROFESSIONAL KNOWLEDGE

An approach to the functions of a model for its management

The suggestive title of a book “If Only we Knew What we Know” leads us to the management of an organization knowledge which must assure, develop and implement an updated model of military art.

By Miguel Podestá



INTRODUCTION TO A CURRENT ISSUE

It is nowadays usual to highlight that we are part of a knowledge society² or that we are part of an era that privileges it, among other things, due to the easy access to information that we have today as from a sustained technological progress that still amazes us, those of us who are part of an older generation.

However, in the military agenda, other traditional issues, such as strategy, current and future scenarios, operational skills to be developed, logistics to be implemented or even aspects inherent to the formal bureaucracy take most of our discussions. In an attempt to avoid these habits, this essay is aimed at analyzing the treatment of knowledge management in the military environment, which is an issue about which there is a lot to be done.

The contemporary importance of knowledge in an organization, according to Hislop³, is due to three main factors which are related to each other:

- › The first one is that to the end of the 20th century, we have seen amazing social and economic changes that have turned knowledge into the key for the conduction of organizations.
- › The second one refers to the fact that the nature of work has significantly changed from one that gave importance to physical effort to one that gives more relevance to intellectual activity.
- › The third one is the correct administration of the knowledge basis by an organization which gives it an undeniable competitive advantage over its adversaries.

In light of such an important issue as knowledge is, it seems to be necessary to limit our proposal to what the title suggests aiming, mainly, at encouraging the consideration of how military men manage the necessary knowledge in order to comply with our mission in society.

SOME BASIC IDEAS

The concept of Knowledge Management, although it already existed with some other approaches, gains importance at the beginning of the 90's with books that call our attention about the treatment of knowledge in organizations⁴. Later, conferences started, institutes were created, all types of publications appeared and it is greatly mentioned in the worldwide web⁵.

Although there are no uniform criteria for one definition, according to Dalkir⁶, we can state that:

Knowledge management is the deliberate and systematic coordination of the persons in an organization, technological processes and the organizational structure with the purpose of adding value through reutilization and innovation.

Knowledge management is the deliberate and systematic coordination of the persons in an organization, technological processes and the organizational structure with the purpose of adding value through reutilization and innovation.

This can be achieved by promoting creativity, sharing and applying knowledge and taking advantage of the valuable lessons learned and of the best practices that are in the corporate memory with the purpose of promoting ongoing organizational learning.

Another important concept is the one developed by Nonaka and Takeuchi⁷ who, in their theory about the creation of organizational knowledge, develop the process of knowledge communication around conversion modes between tacit and explicit knowledge, defining them as:

Tacit knowledge: This is a very personal knowledge which is difficult to be expressed with formal language and, therefore, difficult to be transmitted and shared with others.

Explicit knowledge: This is the knowledge that can be expressed by formal language; that is, with words and numbers and that can be easily transmitted and shared. It is generally expressed in some physical support.

1. Grayson, J. y O' dell, C.; If Only We Knew What We Know; New York; The Free Press; 1998. 2. This is the name given by Peter Drucker in his book Post- Capitalist Society; 1993. Other authors that have emphasized the importance of knowledge in our times: Alvin Toffler and Robert Reich.
3. Hislop, Donald; Knowledge Management in Organizations: A critical Introduction. Oxford University Press; Oxford; p. 2.
4. Among others: Senge, Peter; The Fifth Discipline: The Art and Practice of the Learning Organization; 1990.
5. There were 185,000,000 hits in Google at 10 am on August 12, 2013.
6. Dalkir, Kimiz. Foreword by Jay Liebowitz; Knowledge Management in Theory and Practice; Second Edition; Massachusetts Institute of Technology; Massachusetts; 2011; p. 4.
7. Nonaka, Ikujiro and Takeuchi, Hirotaka; The Knowledge- Creating Company; México; Oxford University Press; 1999.

DEFINING THE SUBJECT AND OBJECT OF KNOWLEDGE

In the military environment, the subject of knowledge is the military professional and the object is the use of the military component of national defense.

The subject of knowledge is a military professional whose training pillars have been the education received as part of their course curriculum or acquired with their own efforts and the practical experience acquired in the different military postings he has been assigned.

In a more concrete way, knowledge basically lies in the individuals of the organization which must create the most convenient environments with which to develop the necessary organizational knowledge to comply with their mission.

It is interesting to note that military knowledge relates to sciences. It is related to Human and Social sciences because of its deep relation with human behavior which require an effective military leadership as well as the political and social consequences of war; it is related to Health science because the mission of the Armed Forces normally implies the use of physical violence and, last, it is related to Basic and Applied sciences because the military potential is closely related to materials that are in constant technological evolution, a circumstance that has a great impact on current military operations.

From a contextual approach, in the opinion of Huntington⁸: *Military aptitude requires broad general culture knowledge in order to be dominated.*

Methods to organize and apply violence in any history stage are closely related to the whole society cultural structure.

In the same way as, within its limits, law is confused with history, politics, economics, sociology and psychology, the same happens with military aptitude. Even more, military knowledge also has borders with natural sciences such as chemistry, physics and biology.

In order to understand their job, officers must have an idea of their relation with other knowledge fields and the way in which they can contribute to their purposes. Also, they cannot really develop their analytical skills, understanding, imagination and judgment if they are only trained in vocational disciplines.

This broad idea expressed by Huntington gives relevance to the concept of pertinence, observing that in many of the topics that give context to military knowledge, the reference theoretical framework is conveniently developed in different environments of our society which we must pay attention to.

The concept of pertinence, “relationship of an item with someone who is entitled to it”, leads us to define the delayed field of military knowledge, focusing on the aspects of interest arising from the mission of the Armed Forces to

The concept of pertinence, “relationship of an item with someone who is entitled to it”, leads us to define the delayed field of military knowledge, focusing on the aspects of interest arising from the mission of the Armed Forces to which the military knowledge effort must be oriented.

which the military knowledge effort must be oriented.

This set of knowledge must be explained, among other means, by a group of doctrine that has a double function: to lead action and contribute for the line of continuous knowledge acquired by the organization not to be interrupted (or, even worse, to go backwards) helping transition between generations.

As we have mentioned before, there is some other knowledge that is not exclusively pertinent to military issues and which is available in the civil context where it has acquired a greater level of development and is updated; it will be necessary then to resort to those sources in order to use it in our work without intending to copy it and waste huge efforts on that.

ITS RELATION WITH LEADERSHIP AND ORGANIZATIONAL CULTURE

If, as we have seen, knowledge has a relevant impact on a modern organization, its correct management is the responsibility of indirect leadership¹⁰.

A possible initial question of a military leader will be ‘what is the knowledge situation in my organization with respect to the state of the art and the current military science?’

Military organizational culture¹¹, as a context in which this management will take place, will also have an influence on this process and there will be advantages, such as the capacity to rapidly implement ideas, and disadvantages, such as the little orientation to innovation and change.

Military organization has traditionally lied on its doctrine elements to produce explicit knowledge and on military institutions to disseminate it but, as we can easily conclude, this issue becomes more complex nowadays.

Some of the elements that must be articulated in such a way that they contribute to a modern management of the military knowledge are study centers, military research areas, operational training centers, simulators, libraries, institutes, courses in the civil sector and abroad, fora and practice communities.



There is also some tacit knowledge which is highly specific and lies with certain members of the organization who have a special domain over a certain topic or discipline, an outstanding creativity, a capacity to understand situational contexts, etc. which require a special treatment because it is difficult to transform it into explicit knowledge. This process is known as the management of talent available in the organization.

This concept is included in the knowledge management and aims at preventing singular persons, whose training has had a huge cost for the national state or who show a high intellectual potential, from leaving the military institution early causing a loss of “corporate memory” or, even when staying at the institution, from not taking advantage of their competence.

Some history examples to think about the management of talent may be the following:

8. Huntington, Samuel; *El Soldado y el Estado*; Círculo Militar, Volume 547; Buenos Aires; 1964; page 64.
9. *Diccionario de la Lengua Española*; 22nd Edition; first entry.
10. For leadership levels, see: Podestá, Miguel; “El Liderazgo Militar y sus Niveles”; *Visión Conjunta journal*; No. 3; 2011; pages 13 to 16.
11. Podestá, Miguel; “La Cultura Organizacional Militar”; *Visión Conjunta journal*; No. 6; 2012; pages 26- 33.
12. Brown, Fabián and Noro, Lauro; *Riccheri- El Ejército del Siglo XX*; Fundación Soldados; Buenos Aires; 1999.
13. Led by Otto Nordenskjöld (1869-1928) in the Antarctic vessel.
14. Destefani, Laurio, *El Alférez Sobral y la Soberanía Argentina en la Antártida*; Instituto de Publicaciones Navales; Buenos Aires; 1974; pages 252, 253 and 266.
15. Directive for the Organization and Operation of the Armed Forces in force.

In 1882, the Second Lieutenant, Pablo Riccheri (22), who had graduated two years before from the Military Academy showing great professional skills, was authorized to study in Europe. After some time, he would become the organizer of the army at the beginning of the 20th century¹².

In 1904, the sub-lieutenant José María Sobral (24), after having been a member of the Swedish expedition¹³ to the Antarctica for which he was appointed because of his professional skills, requested authorization to study in Sweden. Having this possibility been denied, he sadly requested to be withdrawn and was admitted to Uppsala University from where he graduated with a PhD in natural science and had an outstanding performance in the civil sector¹⁴.

BASIC FUNCTIONS OF A POSSIBLE MODEL

The military organization has to develop its own definition of knowledge management and develop a model for its implementation.

In this essay, we aim at making a brief analysis of what we consider the six main functions of a possible model: collect, update, generate, experiment, keep and spread.

The function of collecting implies the identification of the military knowledge necessary in a certain historical context and which is not current anymore and should be revoked. A first approach for this analysis results from the question: what knowledge do I need to fulfill the main mission and subsidiary missions that have been imposed?¹⁵.

If we refer to nowadays issues, topics such as the use of unmanned aerial vehicle, cyberwar or simpler actions such as the use of military forces for support to the community need professional knowledge.

It also implies knowing in which persons of the organization lies the knowledge required and it is here where the activities of education and personnel areas of the forces gain great importance.

The purpose of this function is to collect the necessary knowledge and to know who the people who actually have it are. Moreover, it may happen that we think we have the knowledge but there are no persons who have it or, on the contrary, we may think we do not have the knowledge and some members have it thanks to their effort to train themselves¹⁶.

This function of collecting is a basic activity of doctrine organizations that may be supported by study centers of each service and by personnel who have been assigned a post abroad.

Once the necessary knowledge has been established, it may be available and it must be updated or generated because it is missing. In the first case, it is necessary to call experts¹⁷ of the institution. At this point, it may seem to be necessary to state that highly specific topics may make it not recommendable for any person, even with an outstanding professional performance in any other area, to be part of an updating team.

Another point that becomes relevant is how specific the method used to prepare it is. Our rules, in general, lack this item which is basic when addressing any subsequent updating.

The most complex issue appears when it is necessary to generate new knowledge which may be available in the country or abroad and this requires training professionals as a state prior to the development of doctrine in such a way that the knowledge acquired may become organizational knowledge.

At this point, the military research areas are called to have an important role if research lines match the vacancies for necessary knowledge.

As regards this aspect, leadership has to direct the effort to generate knowledge towards main topics that have a concrete application for the organization considering that the resources to be applied will be scarce.

A great part of the military knowledge will be used in conflict situations so its virtual or real experimentation in times of peace becomes especially significant.

Exercises carried out on the terrain or at an office are, in fact, the natural laboratory to test and validate the doctrine available. It, thus, becomes necessary to pay attention to execution conventions and to the way in which experiences acquired are collected in order for them to later be turned

into explicit knowledge, refining the existing concepts or replacing them with new ones.

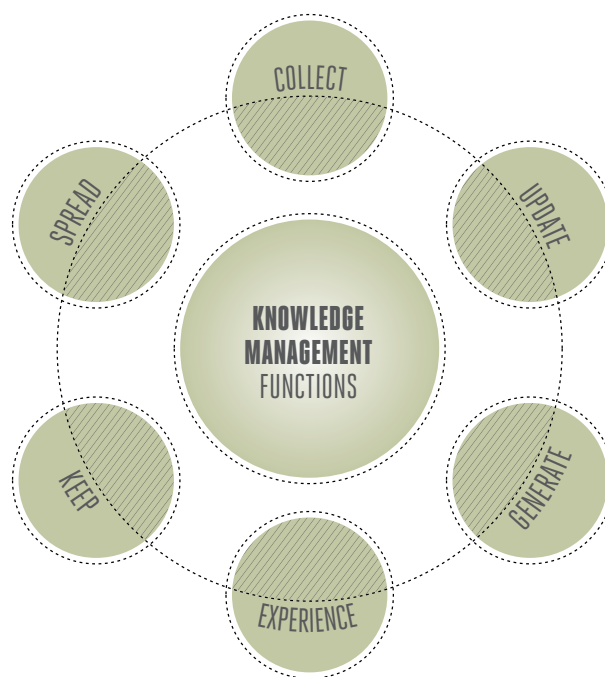
In this sense, from a historical perspective, Military Schools, such as the Joint Staff, have generally been a space for reflection, development and test of the concepts of use and this is proven by the fact that two of the greatest military thinkers in history have been the Director in charge of the Berlin General War Academy (1818-1830)¹⁸, Carl von Clausewitz (1780-1831) and the Director of the US Naval War College (1886-1889 and 1892-1893), Admiral Alfred Thayer Mahan (1840-1914).

Keeping explicit knowledge is another function. Apart from paper, it is necessary to have digital repositories¹⁹ that assure the storage of knowledge generated, beyond the doctrine, such as publications of the service, final assignments and post- degree theses of military interest.

These repositories help to access knowledge, they allow to know about the interest in publications, they generate enriching comments and, in compliance with intellectual property, they generate new approaches to topics.

Spreading knowledge is another step that implies sharing it through different means, teaching it in formal military education and being willing to discuss about it and revise it permanently. The latter may be the most difficult activity to carry out.

POSSIBLE FUNCTIONS OF A KNOWLEDGE MANAGEMENT MODEL



Source: Author

If we educate our men in critical thinking as regards the paradigm established so that, based on valid arguments, they can either accept or improve it, the management of military thinking should acquire particular dynamics which would not probably be the same as in Wikipedia²⁰, but it is necessary to take into account and promote the active participation of the members of the institution.

This statement is also supported by the fact that the necessary knowledge is not found at the top of the organization but it is spread among persons that are part of it and their effective participation will lead to a natural motivation that will promote a greater commitment with their professional activity.

The ability to move in knowledge contexts in a flexible and quick way in order to create a dynamic knowledge cycle ultimately determines the ability of the organization to generate knowledge²¹.

FINAL CONSIDERATIONS

Knowledge management in an organization is a responsibility of indirect leadership (strategic and organizational) that must conceive and implement a model that guarantees an updated military state related to the mission of the Armed Forces in a certain historical context.

A first step may be to include this topic in the usual military discussion generating the conditions to find the most proper ways for the model to be developed.

Our organizational culture may lead us to a situation in which there may be profuse regulations but the concrete results of quality knowledge actually produced and spread may be scarce.

Traditionally, this management has been taken by doctrine elements of the forces but, nowadays, the importance of the problem, the dynamics of information available, the impact of technology and diversity of intervening elements, among other aspects, require the study and implementation of a better model²² in which functional relations will have an important role.

The Education Center of the Armed Forces is called to take an important role in the design proposed as there are four post-graduate military colleges in its premises which have a great part of the military knowledge of our country.

Miguel Podestá

General (R). Staff Officer of the Argentine Army and the Spanish Army. He holds a master's degree in higher education from Universidad de Palermo. Since 2008, he is a professor of Planning and Conduction at the Joint Forces Staff College.

Keeping explicit knowledge is another function. Apart from paper, it is necessary to have digital repositories that assure the storage of knowledge generated, beyond the doctrine, such as publications of the service, final assignments and post-degree theses of military interest.

The Armed Forces with state-of-the-art knowledge that is evidence of their high professional capacity do not only contribute to make the desired dissuasion credible, but they make it desirable for friendly countries to increase the relation of their military factor accelerating regional integration processes.

Being part of an institution that, apart from having a future vision of itself, has updated knowledge that contributes to the social perception of its professional capacity leads its members to have some natural pride that promotes a sense of belonging. Without these conditions, the existing talent will be discouraged and try to find new development horizons taking away with it part of the organization knowledge.

> REFEREED ARTICLE

16. In the year 2004, the Instituto de Enseñanza Superior del Ejército was instructed to prepare a university course on Occupational Safety and Health to take care of this area in military facilities. In the previous analysis, it was stated that there were fifty people in activity who have finished university courses related to this in the civil sector thanks to their effort to train themselves.
17. The criteria of the National Committee for University Evaluation (CONEAU, in its Spanish acronym) that requires an outstanding training for the person who aims at becoming evaluator of a certain discipline may be useful.
18. According to his wife, Marie von Clausewitz, it would be the opportunity and time (twelve years) that he took to write his most important book *On War*. It is interesting to note that this book is only 25% of his total works. From: Clausewitz, Carl von; *On War*; Ministry of Defense of the Kingdom of Spain; Madrid 1999; page 169.
19. It may be interesting to know about the National System of Digital Repositories. <http://repositorios.mincyt.gov.ar/>
20. Virtual encyclopedia of free content in which everyone can edit following rules of mutual respect and objectivity.
21. Nonaka, Ikujiro and Takeuchi, Hirotaka; op. cit.; page 189; *The Knowledge- Creating Company*; México; Oxford University Press; 1999.
22. Dalkir, Kimiz; op. cit. He states that the role of the Knowledge Management Director is still difficult to find in organizations, although some industries, such as the pharmaceutical, aerospace or energy are still in that way.