12th ICCRTS

“Adapting C2 to the 21st Century”

MANAGING THE BATTLE RHYTHM

C2 Concepts, Theory, and Policy

Cognitive and Social Issues

Organizational Issues

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ABSTRACT:

Knowledge Management is like the Total Quality Management approach that was popular in the nineties. Both concepts have buzz words and processes that generate excitement, but are not always fully understood. However, successful manufacturing firms incorporated aspects of Total Quality Management in their day to day operations and witnessed real improvement in the quality of their products. As the excitement began to fade, the processes and the lexicon that defined those processes remained as part of the business culture of America. Knowledge Management is undergoing a similar transition. It is currently popular and organizations are rushing to capitalize on their implicit knowledge. As excitement begins to fade, the language of Knowledge Management will remain to document those successful processes.

Most people in the military understand the concept of the battle rhythm; the cycle of decision making for the Commander and his staff. The battle rhythm takes into account input from sensors, intelligence reports, historical data, environmental data, battle damage assessments, and after action reports. These inputs are provided against the canvas of the stated mission given by higher authority, and are colored by the Commander’s intent to accomplish that mission. The result is a decision or series of decisions that impact the actions and future actions of units that report to the Commander. The battle rhythm is the heart of the military’s knowledge management process. Effectively managing the battle rhythm means effectively processing inputs and intent to allow the Commander to make effective decisions.

This paper attempts to describe an effective process to manage a unit’s battle rhythm using terms that are familiar with the joint war fighter. In

describing this process, this paper does not claim to fix all the problems dealing with information flow in an organization, nor does it claim that the process should be followed blindly in a step by step, cookbook manner. Instead this paper will describe a process that is flexible enough to adapt to any organization and ultimately allows a Commander to make the best decision based on the best information available to his unit. This process helps the unit manage information flow so that it becomes actionable information for their Commander.

OUTLINE:

I. War Fighters Introduction to Knowledge Management

a. Define Data, Information, and Knowledge

i. Data is raw, unrefined information: An unknown contact's position, course, speed and classification.

ii. Information is data held in context:

1. The same contact's position is displayed on a chart that shows its position in relationship to a coastline, a disputed island chain and the position of friendly forces.
2. When held in context the data becomes more meaningful, it becomes information.

iii. Knowledge is information that is *actionable*:

1. The contact report above is reviewed in relationship to the contact's historical deployment cycle, the current political climate regarding the dispute, and an intelligence reports indicating a test of resolve is imminent.
2. The Commander makes a decision to send a unit to investigate the contact's presence near the disputed territory.

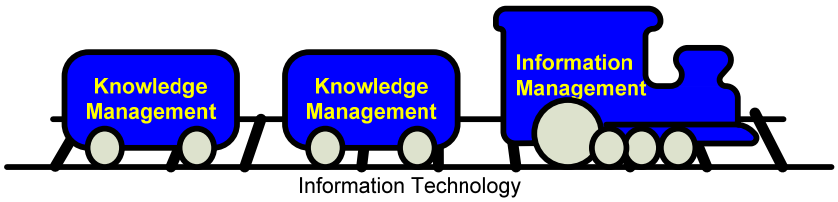
3. The information, when held in context and combined with other information leads the Commander to make a decision, i.e. the information led to action, meaning the information can be treated as knowledge.
4. Knowledge occurs at all levels of command; what may be actionable information for a subordinate is simply information for a supervisor. The Watch Officer who receives the contact report makes a decision to flag the report as important and pass it up the chain of command.

b. Define Information Technology, Information Management and Knowledge Management

i. Information Technology is that technology that deals with moving data from system to system, the tracks that move data around. A ship’s local area network and attached computers and communications equipment are an example of information technology.

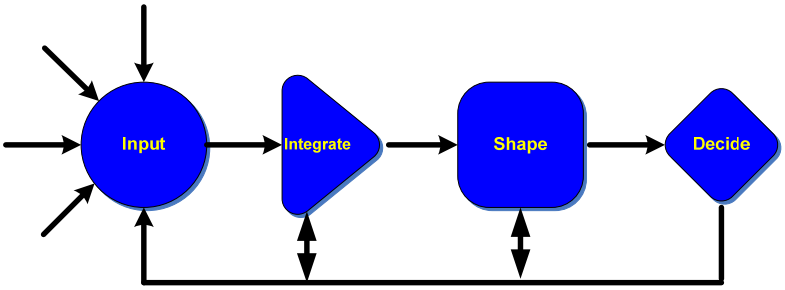
ii. Information Management are the policies and procedures in effect for storing, cataloguing and recalling the information saved by an organization.

iii. Knowledge Management is the process of converting information into knowledge. Knowledge Management is not technology driven, it is people driven. It is about the process of creating knowledge to allow the Commander to make a decision.

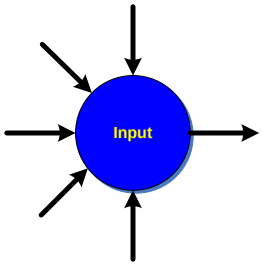


II. Four Phase Battle Rhythm Process

a. The Four Phase Process Diagram



b. Sensor Input



i. Raw data from a variety of sources received at a command and control node.

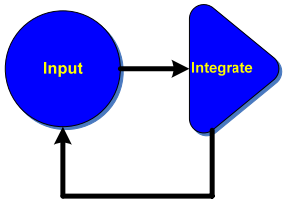
ii. Data is received and placed into context: reviewed against a set of standing orders or trip wires.

iii. A decision is made to either ignore, continue to watch or to flag the information as important.

iv. This information is actionable at the watchstander level but is only information for higher levels of the chain of command where integration with other information must occur.

v. Example: A weather report received by an watchstander impacting a port visit for a Carrier Battle Group

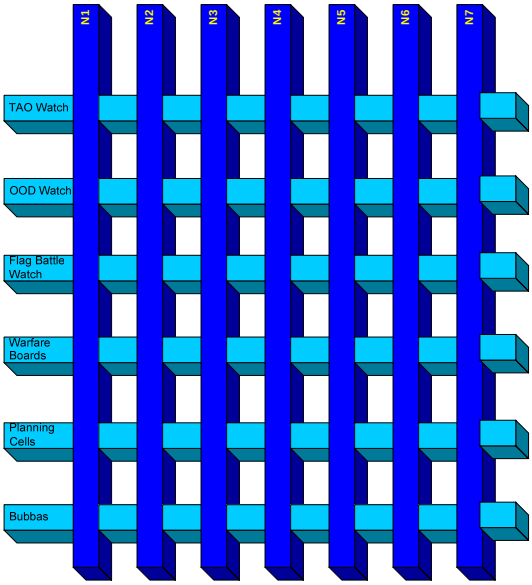
c. Information Integration (Operational Planning Team)



i. Performed by a key group of individual whose task is to integrate the information from various sources and create information for the next level of the chain of command.

ii. Consists of key action officer and data consumers, essentially subject matter experts, who understand the context of the information from their various sources.

iii. Team crosses administrative organizational lines: ensures critical information is not stovepiped inside one organization.



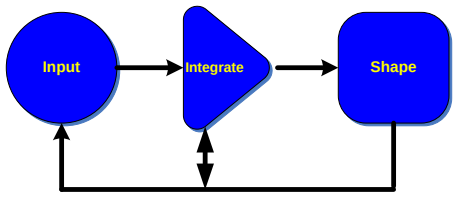
iv. Team meets on an ad-hoc basis, as required to meet the decision cycle of the situation or events.

v. Output may lead to actionable information for some team members or a request for more data from input sources.

vi. Examples

1. An impromptu meeting between the Operations Officer, METOC Officer, Force Protection Officer and Supply Officer regarding the impact of the current weather forecast on an upcoming port visit.
2. A submarine receiving new tasking via message.

d. Information Shaping (Executive Steering Team)



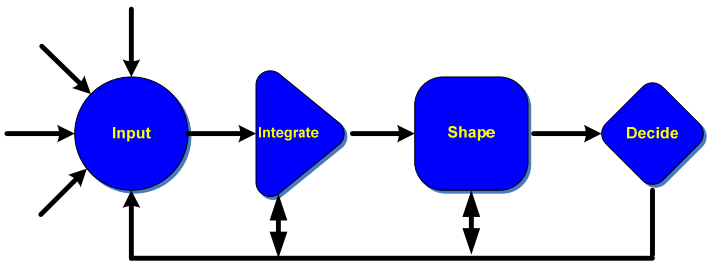
i. Performed by a group of senior decision makers that support the Commander, know him personally, understand the political environment, and are practiced at setting his agenda priorities. Similar to an Executive Officer gathering information from his Department Heads prior to taking a decision to the Commanding Officer.

ii. Team may include members of the Information Integration Team and should include members that cross functional lines.

iii. Output is a set of decisions for the Commander.

iv. Operations Officer, Supply Officer, Intel Officer, Command Master Chief and Chief of Staff discuss a set of Courses of Action to present to the Commander. METOC and Force Protection Officers are present to provide information as required.

e. Decision Point



i. Commander reviews the information presented and makes a decision; yes, no, give me an alternative, give me more information, do nothing.

ii. The key is that if each phase has done their job properly, then the commander has all the information required to make a decision.

III. Three Examples

a. Jet Fighter’s Observe, Orient, Decide, Act (OODA) Loop. Shows that the same principles apply even when some of the phases are completely automated.

b. Submarine receiving new tasking.

c. PACFLT Battle Rhythm Tool.

IV. Conclusion

a. Process can be as fast or as slow as required.

b. Process is not dependent on Information Technology.

c. Process crosses organizational lines and ensures the right subject matter experts are there to integrate and shape the information into knowledge that can be used by the Commander.

d. Good Organizations already practice this process in some form.