

Battle-Wisdom

Improving Cognitive Performance in Network Centric Warfare

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Our Fundamental Argument

- Decision-making is becoming both more difficult and more important in warfare
- DMing itself provides a competitive advantage
- No single DMing style satisfies operational requirements
- Battle-Wisdom describes the ability to switch easily between naturalistic and rational styles
- There is a need to increase level of Battle-Wisdom in the force
 - Need to target Battle-Wise people via recruiting
 - Need to increase Battle-Wisdom of soldiers through education and training
 - Need to retain Battle-Wise soldiers already in the force
- We will present numerous options for achieving these three goals

Outline

- The Imperative
 - Current and future operating environments
 - Need for improved decision-making
 - A Solution
 - Battle-Wisdom
 - Implementation Challenges & Solutions
 - Recruiting
 - Training and Education
 - Retention
 - Summary
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Military Environments Increasingly Complex, Uncertain, and Dynamic

- Blurring lines between combatants and non-combatants
 - Blurring lines between combat, stabilization, and nation building
 - Urban terrain
 - Mix of terrorists, irregular, and regular forces
 - Enemy use of NetCentric technologies and principles
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Implications for Decision-Making (DMing) are Profound

- More responsibility pushed to junior ranks
 - Decisions become more complex, ambiguous, and rapid
 - Implications of decisions can have global consequences
 - Increased need to handle different types of decisions in rapid succession
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Decision-Making (DMing) Is A Competitive Advantage in Military Operations

The ultimate attribute of the emerging American Way of War is the super-empowerment of the war fighter.¹

We want an adaptive organization full of problem solvers. *We want them to know how to think, not just what to think.* [Emphasis added]²

Iraq ... is precisely the kind of unpredictable environment in which a cohort of hidebound and inflexible officers would prove disastrous *the exigencies of the Iraq war are forcing decision-making downward; tank captains tell of being handed authority, mid-battle, for tasks that used to be reserved for colonels.* [Emphasis added]³

¹Arthur K. Cebrowski and Thomas P.M. Barnett, "The American Way of War" *Proceedings of the U.S. Naval Institute*, January 2003, pp. 42-43.

²"On the Record," *Government Executive*, December 2004, p. 18.

³Dan Baum, "Battle Lessons: What the Generals Don't Know," *The New Yorker*, January 17, 2005, p. 44.

No Single DMing Style Satisfies Current Operational Requirements

Boundary Conditions for Different Decision Strategies		
Condition	Naturalistic Decisions	Rational Choice Decisions
Greater time pressure	More likely	
Higher experience level	More likely	
Dynamic conditions	More likely	
Ill-defined goals	More likely	
Need for justification		More likely
Conflict resolution		More likely
Optimization		More likely
Greater complexity		More likely

Battle-Wisdom Represents a Blended DMing Model

- Describes the ability to move quickly and seamlessly between naturalistic and rational choice approaches
 - Is a shorthand term to describe a series of abilities needed to succeed in NCW
 - Military equivalent of “street sense” or “court sense”
 - Is inherently stronger in some people, but can be developed and/or strengthened by all
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What is Needed to Build a Battle-Wise Force?

- Need to increase number of battle-wise people entering the force
 - Need to increase levels of battle-wisdom in all people in the force
 - Need to minimize the number of battle-wise people leaving the force
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Recruiting

Challenges

- Enlisted
 - AFQT and educational background do not capture Battle-Wise qualities
 - Pool is decreasing in size
- Officer
 - Competition from private sector
 - May not be able to observe key traits (e.g. ROTC)

Options

- Increase benefits from enlistment
 - Tangible and intangible
- Develop predictors for Battle-Wisdom
 - More likely for officers
- Increase use of lateral entry

Training

Challenges

- Doctrinal focus may stifle innovation/creativity
 - Issue for major exercises/experiments
- Stigma of failure
- Lack of sufficient variety to develop needed experience
- Need to duplicate conditions in the field

Options

- Increased use of SOF training techniques
 - Multiple stressors
 - Train to failure
- Expansion of NTC approach
 - AARs
 - Highly capable OPFOR
- Continue development and use of simulations
 - Re-create variety and complexity of field situations in NRT
 - Relatively low cost

Education

Challenges

- Groupthink may hinder challenges to conventional wisdom
 - Importance of grades
 - Rank is the classroom
 - Heavy focus on existing doctrine and theory rather than critical thinking
- Insufficient focus on “soft” topics
 - Critical for dealing with civilian populations and coalition partners
 - Key element in winning “War of Ideas”

Options

- Less focus on grades in promotion decisions
- Increase emphasis on “leaving rank at the door”
- Focus on cross-boundary leadership
- Increase education of critical thinking skills
- Address “soft” topics as part of core curriculum
 - Culture
 - Language
 - Conflict resolution
 - Psychology

Retention

Challenges

- Competition from private sector
 - Pay and career develop.
- Retirement system creates undesirable incentives
 - Soldiers past 10-12 years stay until 20 to get benefits
 - Soldiers hitting 20 years tend to retire
 - Results in poor mix of personnel

Options

- More rigorous sorting before 10-12 years
- More flexible retirement benefits
 - Vesting between 5-10 years
 - Increased TSP matching
- Steeper pay scales
- Increased use of variable pay
- Continue to leverage intangible benefits like education and training

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- There is a need to increase level of Battle-Wisdom in the force
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 - Need to increase Battle-Wisdom of soldiers through education and training
 - Need to retain Battle-Wise soldiers already in the force
- We have presented numerous options for achieving these three goals—further research is required to assess the utility of these and other ideas

About the Authors

Irv Lachow is a Professor of Systems Management at The National Defense University and Director of the Information Resources Management College's Advanced Management Program. Previously, Dr. Lachow was a Senior Associate at Booz Allen Hamilton where he managed projects in the areas of IT Strategy and Planning for numerous government clients. Dr. Lachow has extensive experience in both IT and national security. He has worked for the RAND Corporation and the Office of the Deputy Under Secretary of Defense (Advanced Systems & Concepts). Dr. Lachow received his Ph.D. in Engineering & Public Policy from Carnegie Mellon University. He earned an A.B. Political Science and a B.S. in Physics from Stanford University.

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Questions?
