UNDERSTANDING INNOVATION

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WHEN FORMER PRESIDENT George W. Bush spoke to the graduating class at the United States Naval Academy in 2001, he declared a commitment to a military culture of risk-taking and forward thinking, and to recognizing and promoting visionary leaders. The President's pledge was an intriguing promise for members of the armed forces who argue for more creativity and professionalism in the military. The problem is, in contemporary usage, the word *innovation* is now just a buzzword used to sell everything from software to blenders. Its definition is now so broad that we can declare nearly every unorthodox action, thought, or event acceptable as long as we label it innovative. Whether conducting counterinsurgency operations, preparing for conventional war, or transforming to meet new and yet undefined threats, imprecision begets failures. Regulations and field manuals arrayed in lines of vague language will only serve to confuse leaders and produce well-intentioned but misguided actions. The Army's strategic-level leaders must shift their mind-set from the popular appeal of feel-good generalities to a more precise vision grounded in carefully articulated definitions. Rigor is called for. This article explores the nature of "innovation," how the term is abused, and how its lack of precision can spawn behaviors that are more destructive than constructive.

Military Innovation?

When Bush embraced the assumption that the military's "bureaucratic mind-set" frustrates imagination and inventiveness, he challenged commissioned officers to "think big thoughts" and risk failure, because in failure, he reflected, "we will learn and acquire the knowledge that will make successful innovation possible."[1]

That the Army was listening is clear. Field Manual 1-0, *The Army*, states that "Army leaders are continuing to foster creative thinking."[2] They are

"challenging inflexible ways of thinking, removing impediments to institutional innovation, and underwriting the risks associated with bold change."[3]

Perhaps this statement is true, but given the contemporary use of the word "innovation," it is also meaningless. Claiming to be innovative carries about as much weight as declaring a love for puppies; it's easy to say and unpopular to challenge. When words represent some indistinct idea, they are susceptible to reinvention or distortion with potentially significant unintended consequences.[4]

A recent article about military innovation makes the statement that we should not worry about defining innovation because "we know what innovation is."[5] Still, the most basic literature search suggests otherwise. Although the common definition of innovation appears simple—the introduction of a new idea, method, or device—a more precise definition (and comprehensive understanding of how organizations apply the term in practice) will keep frivolous uses of the term from clouding judgment.

Tension in the System

Professor Rosabeth Moss Kanter provides such a comprehensive definition of innovation in organizations. She explains that innovation is more than doing an assigned task faster, or even better. Performing such assigned tasks requires ordinary resources, routine power and authority, and little or no information sharing or gathering outside of the unit; consequently, the changes encounter only minor opposition from the institution. One can accomplish a task within the boundaries of established practice. On the other hand, something that is "innovative" involves highly problematic situations that cross organizational lines and threaten to disrupt existing arrangements. Such problematic situations require resources and skills beyond what we need to do our jobs. According to Kanter, innovations have implications for other functions and areas, and therefore "require data, agreements, and resources of a wider scope than routine operations demand."[6]

Kanter's definition makes it clear that true innovation is not a discrete event or individual action, but a process. As a process, it demands that leaders understand multiple complex systems. Innovation thus includes building consensus and preventing interference or sabotage from risk-averse or hostile players. It also requires an understanding of differ-

ing frames of reference, intricate structures, and diverse control and boundary systems.[7]

Control systems represent the shared values of an organization. They act as a moral compass to encourage initiative and decentralized decision-making. Employees as trusted agents are ideally free to act because they know what is acceptable under such a framework.[8] Likewise, boundary systems function as limiters. They are the constraints and restraints imposed by management—consistent with specific codes of conduct—to prevent unlawful or unethical action. Taken together, controls and boundaries help organizations motivate and inspire creativity without sacrificing protection against opportunistic behavior.[9]

Structure comes in the form of bureaucracy. Bureaucracy is a value-neutral term, an organizational model that is neither good nor bad. Although it is popular to say that bureaucracy restricts human potential, its highly developed sets of rules and procedures also ensure fair treatment among employees.[10] Bureaucracy ideally emphasizes employee participation, conflict resolution, and shared goals.[11] For example, although they are considered bureaucratic, Army regulations protect Soldiers against unfair treatment and the capricious behavior of their leaders. Bureaucracy, in the form of law and regulation, exists to make the Army a meritocracy, not a system where manipulation and cronyism are more important than performance. A strong relationship binds innovation with control and structure. The former cannot exist without the latter two.

Professor Robert Quinn of the University of Michigan developed the "competing values" framework using the four management models that developed as the industrial revolution evolved into the present technological revolution.[12] His framework incorporates the roles managers play in each of these models and helps organizations address the everyday tensions and demands created as these different styles interact.[13]

Quinn's argument is that there's a point where a leader's ability to do good using a particular model and value set diminishes, leading to unfortunate

> *Structure comes in the form of bureaucracy.*

consequences.[14] Quinn calls this the "negative zone." All leaders must understand this pressure so that "one's strengths do not become the source of one's failure."[15] Innovators, for example, can be creative, but if they push their inclinations too far, their behavior leads to belligerence, chaos, disastrous experimentation, and unprincipled opportunism.[16]

Opposing the innovator are the monitors and controllers. As the dependable technical experts, they are the backbone of the organization. However, like the innovator, they can cease to be an effective member of the organization if they move into the negative zone. In the bureaucrat's negative zone is mindless adherence to policy or procedure leading to unimaginative and cynical behavior, neglected possibilities, and stifled progress. In this negative zone, they function in a way that is antithetical to professionalism.[17] Good leaders, Quinn says, must balance the positive aspects of bureaucracy against the desire to innovate. To function properly, a strong culture of innovation *requires* a strong bureaucracy.

Despite this, many in the Army are quick to blame the "bureaucratic mind-set" for inhibiting progress, but according to John Kenneth Galbraith, there are more complex reasons why organizational change is difficult. Galbraith coined the term "conventional wisdom."[18] Galbraith states that what exists, and is familiar, has an advantage because it has proven acceptable to a majority. People approve of what they understand, and they will passionately defend what they have learned and are familiar with. In short, familiarity is acceptable, and acceptability leads to stability. Galbraith adds that any deviation (or originality) might be seen as faithlessness or backsliding. Organizations, he argues, achieve stability by formal adherence to an officially proclaimed doctrine and stigmatize any deviation as incorrect. With conventional wisdom, *rank is a reward for articulating what is acceptable* (for defending the conventional wisdom). All education and professional development programs focus on perpetuating this doctrine to capture what is known, proven, and practical.

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Still, Galbraith says conventional wisdom serves a greater good: "Every society must be protected from a too facile (simplistic) flow of thought.…A great stream of intellectual novelties, if all were taken seriously, would be disastrous. Men would be swayed to this action or that; erratic and rudderless."[19] Galbraith states that events and *not* ideas change conventional wisdom. The people who appear as great innovative thinkers are often only pointing out what has become true, but not yet commonly known and accepted. Change is normal and expected. Without an appreciation of the existing system, self-proclaimed mavericks might be sabotaging a normal and rigorous process of proposal, peer review, and acceptance. For this process to work well, the champions of innovation and the managers of bureaucracy need to understand that this is not a zero-sum game, and that irrational actions do not build consensus.

Innovation in Complicated Systems

Although many leaders recognize this truth, they continue propagating common fallacies when they talk about change. For example, when Bush referred to the development of carrier aviation during the interwar period (during an address at Annapolis), he painted a picture of simple choices. He retold the fable about pioneering aviators challenging recalcitrant battleship admirals for control of the Navy and how fortunate we were that the aviators succeeded. The truth is far more complicated, and a folklore version of it only adds to popular misunderstandings about innovation. The interwar period demonstrated how innovation happened in a complicated system, not a historic struggle between progress and obstinacy.

Despite the restrictions of the Washington and London Naval Treaties (meant to control the arms race), the U.S. Navy in the 1920s and 1930s had to cover two oceans and the Panama Canal Zone. Although the Navy enjoyed popular support, budgets were tight, and the decision to build any ship meant betting on what that ship would face through its 20- to 30-year service life. A fleet's power came from the weight of its offensive punch and how much damage it could inflict on the enemy's fleet and still survive. The battleship was a proven, technologically advanced weapon, and continued investment

in battleship construction fit the accepted paradigm. Despite a legend to the contrary, the aviation community did enjoy meaningful support during these years, as advances in carrier and aircraft design showed. But given limited budgets and an unknown enemy, the admirals running the Navy were asked to bet their future offensive punch on small aircraft, each carrying one 500-pound bomb, with no radio communication for command and control, and a range of roughly 350 miles, one way. Radar, which came into being by the late 1930s, did not exist. Despite the *promise* of aviation, aircraft carriers were not a strong offensive weapon. If their planes could find their target, and hit it, the bombs they carried would not penetrate the decks of many capital ships. Aviation at that stage of development lacked the ability to defeat an enemy fleet.[20] The fact that aviation drew the attention it did was the result of a remarkable leap of faith, deliberate negotiation, and reasonable investment in unproven but promising technology.

Just as former President Bush did in his remarks, we tend to treat innovation with reverence. We have romanticized it, and we are always chasing after it, as if it is some holy grail. This sets up unrealistic expectations, and it can compel leaders to push their behavior into Quinn's negative zone by chasing a chimera. Fortunately, there is evidence that today's Army is very much an innovative organization with a culture that accepts creativity and embraces change. The Army of the 1970s and 1980s was far less accepting of innovation. As with wars of the past, the immediacy of current operational environments has the capacity to open minds.

The Military's Risk Acceptance Culture

The business community envies many of the common concepts and processes today's military officers take for granted and even fail to see as innovative. When executive coach Kathleen Jordan encourages business organizations to build a culture of risk acceptance where leaders experiment, try, sometimes fail, but always learn, her model is the military's after-action review process. Jordan offers eight examples from the military that she says would help the business world become more innovative, if it adopted them.

She begins with the military's risk acceptance culture, calling it "fast beats perfect." Jordan lauds the

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military decision-making process, calling it a decision process by careful design in an uncertain and ambiguous environment. Leaders will never have all of the information necessary to make perfect decisions, she says, so one must know how to take advantage of opportunity. Believing that powerless leaders are more inclined to guard territory and shun collaboration to the detriment of an organization, she praises the military for delegating authority by empowering subordinates and trusting in their judgment when the chaos of battle precludes gaining further guidance or instruction.[21] To this, she adds the remarkable use of commander's intent to provide a framework for subordinates to change what they are doing in order to meet an overall purpose.

Finally, Jordan focuses on character and training, commending the military's ongoing commitment to leadership development and skills training. Training in itself is not innovative, but it provides the kind of leverage that makes all the "innovative insights," such as "commander's intent," possible. To Jordan, the military's rigorous and continuous training program is a model for the corporate community.

Ironically, even as Jordan published her work, the Army was reinventing major portions of its education program. Colonel George Reed has observed that "one of the hardest things for successful professions to do is question the assumptions on which their success is founded."[22] Yet, the Army does it regularly. As noted, the Army overhauled its entire officer education system in the last three years, doing so largely because of the feedback its senior leaders received from the Army Training and Leader Development Panel for Officers. The transition from the Command and General Staff to the new ILE program represented a shift in more than the curriculum. The Army fully updated its pedagogical methods, shifting from the instructor-oriented environment to student-centered collaborative learning pioneered in the late 1980s with the Combined Arms Services Staff School.

describes innovators as angry and frustrated mavericks looking for new ideas. He calls them zealots and malcontents, people who will never become CEOs or leaders because they are more interested in finding new challenges, more "obsessed by searching for the future" than they are about following career paths. The maverick breaks rules to invent new rules.[27]

Business guru Tom Peters agrees, and celebrates the idea of destruction and failure as essential to creativity and innovation. Peters says that ours is "an age that begs for those who break the rules, who imagine the heretofore impossible… and stride forth."[28] He adds, "We value performance, but performance is the last refuge of those with shriveled imaginations!"[29] According to Peters, innovation is frightening to many of us because it represents a loss of control and authority.[30] Perhaps this is why the term "innovator" was once a pejorative, a clear insult. In the late 18th century, calling someone an innovator was an accusation of *impulsiveness*, and likely to infringe on the law. Innovators were dangerous.[31]

Extreme but increasingly popular interpretations of innovation worry some business leaders and military scholars. According to Robert Simons, author of *Control in the Age of Empowerment*, the pressure to achieve superior results sometimes collides with behavioral codes, compelling some to bend the rules.[32] Simons agrees that flexibility and innovation are essential elements of today's competitive business climate, but his litany of "unwelcome surprises," where employees who broke through control mechanisms jeopardized entire businesses, makes it clear that Cheverton's bureaucracy-busting conspirators are putting their careers at risk.

Soldiers of the 25th Infantry Division assigned to Patrol Base Olsen in Samarra, Iraq, stand in formation prior to meeting Chairman of the Joint Chiefs of Staff Navy Admiral Mike Mullen, 18 December 2008.

DOD, MC1 Chad Mcneeley

The Center for Army Lessons Learned is another example of the Army's willingness to accept creativity and embrace change. In fact, its mission *is* change.[23] It represents a process by which senior leaders and analysts review and evaluate meritworthy ideas before disseminating them to the field. Between March 2005 and August 2006, The Center responded to more than 8,000 warfighters from every service, component, and rank.[24] Change does not always come at the pace its champions demand, but in the main, there is sufficient evidence to suggest that the military is not afraid to critically examine its own practices and admit that there is a better way.

Bureaucracy, Creativity, and Innovation

Even so, it remains popular to denigrate structure and call for radical change. We have slurs such as "McDonaldization" to describe bureaucracy, and pundits calling for bureaucracy-busting ways to circumvent control systems and short-cut the change process.[25] Journalist Richard Chevron—who has likened innovation to lying, cheating, and stealing in order to drive change—envisions ad hoc teams of *conspirators* taking risks with corporate funds without corporate permission.[26] He

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Equating innovation to rashness, military historian Conrad Crane warns that the military "does not need a culture that encourages daring risk-taking." He agrees that innovation and boldness have become the latest buzzwords and should not be substitutes for sound judgment.[33] Citing how today's political leaders misrepresent historic events to bolster their interpretation of innovation, he makes a credible case for a more careful examination of innovation.

Consider the case of General Billy Mitchell. In spite of anecdotal accounts that his views on air power prompted his court-martial, the Army actually prosecuted him because of insubordination. He accused the War Department of criminal negligence for not adopting his ideas wholesale. In many cases his notions would prove incorrect.[34] The issue was never the military's failure to accept innovation, but the unacceptable behavior of a man unwilling to recognize–as good strategic leaders should—the nature of his environment and the systems necessary to advance his vision.

The Army needs a system that encourages mistakes and does not punish failure, but not one that permits and encourages liberal interpretations of boundaries and control systems. Such an unrestrained environment may be too much for today's officer corps to handle. The Army Training and Leader Development Panel (for officers) revealed that officers striving to follow the service's values and ethics have an inadequate understanding of what these concepts mean and that the Army's leaders do a poor job of reinforcing the message.[35] In 1999, the Strategic Studies Institute published *Army Professionalism, The Military Ethic, and Officership in the 21st Century*. One of its conclusions is that the encroachment of egoism ("What is good is what's best for me") now pervades the Army's leadership.[36] What the authors essentially said was that an officer is inclined to do what is right, not because it is right, but because it looks good: the implication being that this same officer would do what is wrong if it made him look good. Most alarmingly, one may fail to see the difference.[37] The boundaries of what is acceptable and what is risk are very much open to interpretation.

Fortunately, there is no shortage of scholars and practitioners willing to debate the future of the profession in an open and constructive way. There is a perpetual tension between the need for conformity and the desire for critical thinking. Among these discussions is the charge that the Army's anti-intellectualism and bias against thinkers prevents some from fully expressing their ideas.[38] Another suggests that the officer evaluation system, with its focus on individual accomplishment as opposed to long-term organizational health, prevents officers from ever thinking creatively.[39] One report claims a bias against the warrior, and that the Army focuses so much on the long term that it neglects their immediate needs.[40] And this exchange persists in the premise that a bureaucratic mind-set (again, seen as negative) dominates the Army's culture. The root of this pattern—with bureaucracy always seeming to surface as a contentious issue—may stem from the very composition of the officer corps.

Studies continue to show that a plurality of military officers come from two very distinct Myers-Briggs (MBTI) personality types, each with a preference for efficiency, data, structure, and the bottom line—a preference for bureaucracy.[41] Quinn reminds us that an inclination toward structure does not preclude us from acting flexibly and creatively and embracing change. In other words, a bureaucratic disposition need not be an impediment to change, but it may influence how the Army as a group defines the boundary between Quinn's negative and positive zones. Of course, the Myers-Briggs typology test is not an exact science, but these findings do point to a kind of personality dominance in the Army's officer corps.

This data can suggest that the Army suffers from groupthink, that the organization and the people running the system exert pressure to enforce conformity.[42] This conclusion is plausible because, according to the aforementioned studies, the remainder of the officer corps is distributed among the other 14 MBTI types. Peer pressure from such a dominant group can nullify diversity.[43] Groupthink behaviors include an unquestioned belief in the

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group's morality and a collective effort to rationalize actions or discount opponents. It manifests as self-censorship, but it mirrors Galbraith's notion of stability through formal adherence to an officially proclaimed doctrine.[44]

The message for Army leaders—particularly for the 46.5 percent of officers outside of the majority—is to recognize the tendency or bias toward bureaucratic thinking. Cheverton and Peters reminded us that frustration and anger drive conspiratorial and ungoverned behavior. One can easily imagine zealots acting to create separate evaluation plans or new tactics or rules of engagement based on facile experimentation, with potentially unintended consequences for all. Whether talking about innovation or change or conformity and what defines a troublemaker, how these different types interact and communicate could mean the difference between successful change or "ideas stigmatized as incorrect."[45]

Innovation Gone Awry

The abuses and leadership failures at Abu Ghraib represent a glaring contemporary example of uncontrolled innovative behavior. They serve as a warning to those condoning rampant bureaucracy-busting. A maverick might see in the abuses an expression of creativity, just another set of concepts developed to address a perceived difficulty, but not inherently wrong. Control systems such as rules of engagement, when perceived as obstacles, risk circumvention in the name of expediency or perceived noble ends. The maverick might claim that innovative tactics, especially if successful (as defined by the individual) should supersede any restrictions put in place by "Fobbits," "REMFs" (rear-echelon m-f-s) or "petty bureaucrats."[46] While it is true that innovation needs its champions and mavericks, innovators are not necessarily wearing white hats in the effort to combat bureaucratic inertia. When facile judgments

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cross into ethically normative and strategic ramifications, they are malignantly corrosive.

Before the Army finds itself embroiled in a scandal that results from a second- or third-order effect of some ostensibly well-intentioned innovation, it should desist from its rush to remove barriers. However, this does not mean the Army should cease its call for new ideas, prudent experimentation, or a culture that rewards creativity. It just means the Army needs to develop a more precise vision of what it wants and use a vocabulary to match.

We can find both in "the learning organization," a concept developed 17 years ago by MIT lecturer and author Peter Senge. The learning organization is not a trendy program, but a prescription for getting past cosmetic and short-lived buzzwords and into the details of real improvement. Senge's ideas are thus trenchantly relevant to current Army doctrine and concepts. In fact, the Army already practices much of what Senge details, so there is little new to implement or adopt. Studying his concept serves two purposes. First, we can take credit for having an institutional culture that many consider a model for corporate America, and second, by doing so, we can drop the rhetoric surrounding "innovation" and concentrate on generating improvements within the system.

Senge's premise is simple. For a business to succeed, its employees must learn faster than their competitors. Organizations must recognize the obstacles to learning and behave in ways to mitigate these tendencies. According to Senge, people base decisions on incomplete information, using assumptions and generalizations without understanding the big picture. They solve symptoms and then seek to blame some anonymous "them" when, in the end, nothing changes, or their myopic ideas complicate rather than solve the problem.[47]

Innovation in Learning Organizations

If this language sounds familiar, it should. It reflects the negative depictions of so-called "innovative" behavior. Part of what makes an organization a learning one is its ability to get past superficial models and broad abstractions that characterize our romantic view of innovation and mavericks. The successful organization sets aside unchallenged assumptions, gut-based "facts," and sloppy reasoning, because they prevent objectivity

and stifle learning.[48] Learning organizations insist on fact-based decisionmaking, and insist on data and a careful examination of evidence to ensure the focus is on the cause, not on the symptoms of the problem. The Army's new ILE curriculum, which stresses critical thinking and insists on the use of intellectual standards such as clarity, accuracy, and fairness, is evidence of this behavior. Although we often debate their merits, the processes found in our doctrine for deliberate decisionmaking verify that we acknowledge our conscious or unconscious biases and work to overcome them.[49]

Learning organizations also regularly review successes and failures and examine how they react to emergent environments. Organizations that understand that "the knowledge gained from failure is often instrumental in achieving subsequent successes" are willing to learn from past experience.[50] To the military officer, this logic is not new. The benefits of this process are evident in the Center for Army Lessons Learned products, internal after-action review data, and the benefits of ad hoc groups such as the Improvised Explosive Device Task Force.

An important tenet of a good learning organization is its ability to disseminate what it learns quickly and efficiently. This includes not only information sharing, but also incentives to reward success so that practices can change quickly. Dr. Jordan recognized in the military a sense of unparalleled collaboration, simultaneously accusing the business community of opposite behavior. She says that while it is easy to talk about sharing best practices, corporate reward systems actually undermine teamwork and encourage sub-optimization.[51] In the military, she observes, the sense of mutual support overrides competitiveness. Notwithstanding the debate about officer evaluations, the business community believes the military defines success as the achievement of mutual goals, not as individual accomplishment.

Understanding the learning organization is only half the battle. The other half is in making sure not to fall into the trap of cosmetic change, or worse. Galbraith says that members of the establishment will often advocate for originality by dressing up old truths in new forms or by accepting minor heresies as good. Such substitutes for real change can short circuit introspection and reflection, which are by no means widely accepted or easily practiced. According to historian Williamson Murray, rash judgments coupled to personal agendas easily cloud or distort understanding.[52]

Change is hard no matter how you dress it up, and we can expect setbacks and imperfections. The most important thing senior leaders can do to keep the process vibrant and substantial is to refuse superficial debate, publicly challenge arguments (inside and outside of the Army) that fail to meet intellectual standards, and resist the urge to distill thinking and learning down to a matrix where too often the objective is simply to complete a checklist. The way we develop critical thinkers—members of an organization committed to learning—is through practice, not prescription. The simplistic language found in FM 1-0 is inimical to this concept and detrimental to the Army's leadership development goals. The next Army Chief of Staff should rethink his message and how he delivers it; otherwise, he will get exactly what he asks for, but not what he really wants.

The potential consequences of ambiguous language are real and occurring. The ongoing discussion in the Army about innovation, boldness, adaptability, and change is promising, and it proves that we need not accept buzzwords as substitutes for meaningful guidance. Offering the model known as the learning organization is an attempt, not to dump another panacea into the mix, but to suggest an existing framework for understanding innovation, one that will add precision to its message and ideally develop creative and flexible leaders. **MR**

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NOTES

1. George W. Bush, "Remarks by the President at U.S. Naval Academy Commencement," 25 May 2001, <www.whitehouse.gov/news/releases/2001/05/20010525-1.html> (7 January 2007).

2. This quotation comes from a section title in Field Manual 1-0, *The Army*, (Washington DC: U.S. Government Printing Office [GPO], 14 June 2005) "Inculcating a culture of innovation." Also, it is interesting to note that in the 2001 edition of FM 1-0, the word innovation appeared twice, but when General Schoomaker republished it in 2005, the word innovation appeared 13 times.

3. Field Manual 1-0, *The Army*, 4-10, sec. 4-35.

4. Charles J. Fox, "Postmodernity, Reform Fads, and Program Management: Presumptive Consequentialism vs. Discourse Ethics," *Teaching Ethics and Values in Public Administration Programs: Innovations, Strategies, and Issues* (Albany, New York: State University of New York Press, 1998), 253-70.

5. David A. Fastabend and Robert H. Simpson, "Adapt or Die," *Army* 54 (February 2004): 14.

6. Rosabeth Moss Kanter, "The Middle Manager as Innovator," *Harvard Business Review* 82 (July-August 2004): 153.

7. Stephen A. Shambach, ed., *Strategic Leadership Primer,* 2d ed. (Carlisle, PA: U.S. Army War College, 2004), 41.

8. Robert Simons, "Control in the Age of Empowerment," *Harvard Business Review* 73 (March 1995): 82.

9. Ibid, 86.

10. Robert N. Lussier, *Management Fundamentals,* 3d Edition (Mason, OH: Thomson South-Western, 2006), 12.

11. Ibid., 38.

12. The four models are human relations, internal process, rational goal, and open systems.

13. The eight roles are mentor, facilitator, monitor, coordinator, director, producer, broker, and innovator.

14. Robert Quinn, *et al.*, *Becoming a Master Manager: A Competency Framework*, 2d ed. (New York: John Wiley and Sons, Inc. 1996), 21.

15. Ibid.

16. Ibid.

17. T.O. Jacobs and Michael G. Sanders, "Principles for Building the Profession: The SOF Experience," *The Future of the Army Profession*, 2d ed., Don M. Snider, project director, Lloyd J. Matthews, ed. (New York: McGraw-Hill, 2005), 442.

18. John K. Galbraith, *The Affluent Society* (New York: Houghton Mifflin Company, 1998), 8.

19. Galbraith, 16.

20. The U.S. Navy repaired and used against the Imperial Japanese Navy nearly all of the battleships sunk at Pearl Harbor.

21. Kanter, 155.

22. George Reed *et al.*, "Leadership Development: Beyond Traits and Competencies," *The Future of the Army Profession,* 2d ed., Don M. Snider, project director, Lloyd J. Matthews, ed. (New York: McGraw-Hill, 2005), 585.

23. Center for Army Lessons Learned Mission Statement: collect, analyze, disseminate, integrate, and archive Army and Joint, Interagency, and Multinational observations, insights, lessons and tactics, techniques, and procedures to support full spectrum military operations.

24. Craig Hayes, "State of the RFI System: Who are CALL's Customers," briefing slides with notes, presentation for CALL, 7 April 2006.

25. For a detailed discussion of this thesis which was originally developed by George Ritzer in 2000, see Remi Hajjar, and Morton Ender, "McDonaldization in the U.S. Army: A Threat to the Profession, *The Future of the Army Profession,* 2d ed., Don M. Snider, project director, Lloyd J. Matthews, ed. (New York: McGraw-Hill, 2005), 515.

26. Lanny Vincent <lanny@innovationsthatwork.com> electronic mail message to Thomas Williams 26 August 2006. Larry Vincent worked with Cheverton on his book, and runs the publishing company *maverickway.com* to advance his ideas. In this email, he stated that he did exaggerate to make his point, but his point stands.

27. Richard E. Cheverton, Lanny Vincent, and Bill Wilson, *The Maverick Way* (La Palma, CA: Maverickway.com, LLC., 2000), 82.

28. Tom Peters, *Re-Imagine* (London: Dorling Kindersley Limited, 2003), 19.

29. Ibid., 31.

30. Ibid., 67.

31. Catherine Drinker Bowen, *Miracle at Philadelphia* (Boston: Little, Brown and Company, 1996), 12.

32. Robert Simons, "Control in the Age of Empowerment," *Harvard Business Review* 73 (March 1995): 84.

33. Conrad C. Crane, "Beware of Boldness," *Parameters,* 36 (Summer 2006): 96.

34. Russell F. Weigley, *History of the United States Army* (Bloomington, IN: Indiana University Press, 1984), 413.

35. Department of the Army, Army Training and Leader Development Panel for Officers, ATLDP-O (Washington DC: GPO, 2002), OS-8.

36. Don M. Snider, John A. Nagl, and Tony Pfaff, "Army Professionalism, the Military Ethic, and Officership in the 21st Century" (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1999), 7.

37. Don M. Snider, Professor of Political Science, U.S. Military Academy (USMA), meeting with the author at USMA, 18 December 2006.

38. Lloyd J. Matthews, "Anti-Intellectualism and the Army Profession," *The Future of the Army Profession,* 2d ed., Don M. Snider, project director, Lloyd J. Matthews, ed. (New York: McGraw-Hill, 2005), 81.

39. George E. Reed, "Toxic Leadership," *Military Review* 84 (July-August 2004): 67.

40. Christopher Gehler, "Agile Leaders, Agile Institutions" (Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, August 2005).

41. I have three sources for this claim. Herbert F. Barber published the most recent study showing 53 percent in 1990. In an earlier study, cited in an article by then Major Don Vandergriff, it showed that 56 percent of senior (07 level) Army officers were ISTJ and ESTJ. The last reference is from Diane Williams of Nova Southeastern University. She conducted a study published in the *Journal of Leadership Studies,* 1998, showing 34 percent were ISTJ and ESTJ.

42. Ibid.

43. Lussier, 118.

44. Irving L. Janis, "Groupthink," *Psychology Today* 5, (November 1971), 43.

45. Galbraith, 16.

46. Popular characterizations of staff or support personnel. Fobbits are those Soldiers who never leave their Forward Operating Base. The restrictive ROE that are necessary during COIN operations frustrate many Soldiers.

47. Peter M. Senge, *The Fifth Discipline: The Art and Science of The Learning Organization* (New York: Doubleday, 1990), 114.

48. Galbraith, 16.

49. Some suggest that it is too structured for the pace or chaos of battle. Books such as Malcolm Gladwell's *Blink* examine a more intuitive process, but even Gladwell admits that truly successful decision making, even what he describes as gut level, are truly representative of rules and learned processes.

50. Modesto A. Maidique and Billie Jo Zirger, "The New Product Learning Cycle," *Research Policy* 14, no. 6 (1985), 299, 309; quoted in David A. Garvin, "Building a Learning Organization," *Harvard Business Review* (July-August 1993): 85.

51. Kathleen Jordan, "It paid off in Afghanistan: Eight lessons from the U.S. military that you can use," *Harvard Management Update* (March 2002), 4.

52. Williamson Murray "Armored Warfare: The British, French, and German Experiences," in *Military Innovation in the Interwar Period*, ed. Williamson Murray and Allan R. Millett (Cambridge, UK: Cambridge University Press, 1996): 7.