Retired Gen. Eric K. Shinseki sits inside a Stryker vehicle 5 May 2011 in Sterling Heights, Michigan, and talks with Col. Robert Schumitz, Stryker project manager, about how the vehicle was first fielded by the U.S. Army. As the authors explain, Shinseki worked with then Secretary of the Army Louis Caldera to ensure the Army’s fielding of the Stryker brigade combat team, considered a successful enterprise-level action. (Photo courtesy of Detroit Arsenal Media Services, U.S. Army)

Taking A Bite of the APPLE(W)
Understanding the Defense Enterprise

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With great fanfare and high expectations, the Department of Defense (DOD) implemented the National Security Personnel System (NSPS) in 2006. This replacement for the General Schedule (GS) was intended to bring DOD civilian personnel practices into the twenty-first century. Accordingly, it implemented pay for performance through the use of pay pools that supervisory panels would use to assess civilian employees’ achievement of designated objectives. The panel would then allocate pay increases and bonuses based on performance. In 2009, Congress passed a law ending NSPS, and in response, President Barack Obama’s first official act was telling the department to go back to the old GS system.1

Although NSPS had noble goals, the DOD leadership—both civilian and uniformed military—made mistakes in implementation that could and should have been foreseen. The DOD did not adequately consider the concerns of the various interested parties and did not sufficiently address the requirements of the existing bureaucratic processes. The NSPS relied on a complex system of evaluation that demanded supervisors’ time and was difficult for employees to comprehend. The NSPS lacked safeguards to ensure fairness for all employees and to prevent escalating costs throughout the DOD.2 Most significant, department leaders inappropriately assumed that top-down guidance without adequate consideration of stakeholders’ concerns would not jeopardize successful implementation.3 In effect, the DOD leaders failed to observe and implement effective change management principles.

Recent history is replete with examples of large DOD initiatives such as NSPS and other change efforts that never quite gain “irreversible momentum” and eventually fail. Some DOD critics argue that such failings are due to the inability of leaders to think and operate at the enterprise level.4 But, how is it that senior leaders with extensive experience and great power have been unable to implement initiatives such as NSPS? Exploring this question could provide lessons for our field-grade and senior officers, and comparable civilian leaders as they are likely to design and will then be charged with implementing various programs over the course of their service.

This article proposes a new framework for assessing the enterprise environment to help leaders and action officers at the enterprise level. It consists of six enterprise components for identifying and assessing the authorities, the players, the processes, the leverage points, the evaluation criteria, and the work-arounds (APPLE[W]) of a proposed action or initiative. This systematic procedure can lead to greater understanding of the proposed initiative and support development of viable implementation.

The word “enterprise” itself is not well understood within the Army and the DOD. To many, it conjures images either of Capt. Kirk (or Picard) from the Star Trek series or management consultant graduates of business schools. The word is foreign to the tactical and operational culture of the Army, in which soldiers and leaders focus on their units achieving assigned missions to support operational objectives that serve national interests. The word “enterprise” is used seventeen times in the DOD dictionary but is never defined.5

Merriam-Webster offers two definitions that are relevant in this DOD context. An enterprise is “a project or undertaking that is especially difficult, complicated, or risky”; and is also “a unit of economic organization or activity, especially a business organization.” The DOD enterprise comprises the business activities that enable DOD to provide capabilities and ready forces to operational commanders through existing processes and infrastructure. Fundamentally, the enterprise is the business side of warfighting DOD; as such, it lacks a single commander or leader who assumes directive control. Accordingly, DOD enterprise leaders

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gain cooperation, engender collaboration, and build consensus to succeed.

Joint doctrine defines three levels of warfare: tactical, operational, and strategic. This construct enables warfighters to make effective use of their capabilities. However, these levels are less helpful for describing the DOD enterprise—the part of the department that provides its Title 10 capabilities such as equipping, manning, and supplying. The DOD’s enterprise issues, initiatives, actions, and activities support and may significantly influence all three levels of warfare. Figure 1 depicts the enterprise alongside the levels of warfare.

To the Army’s credit, it is making strides to improve leaders’ ability to operate effectively at the enterprise level. In 2015, the Army published a completely revised Army Regulation (AR) 5-1, Management of Army Business Operations. The Army Management Framework was introduced in AR 5-1 to assist personnel working on enterprise-level problems (see figure 2, page 67).

This framework can assist leaders in placing enterprise actions and activities in context. It provides “a useful framework ... for the application of management techniques in Army organizations.” This “conceptual model ... relates best Army management practices that have consistently proven to result in improved outcomes.” The framework can also support those working on Army enterprise-level issues to organize their actions and focus their efforts; yet by itself, the Army Management Framework does not suffice. Even if the Army uses it in professional development to educate and train new leaders, the Army Management Framework may help enterprise leaders organize and execute their missions. However, it does not help leaders and their staffs to understand, visualize, or describe the enterprise environment.

To facilitate leaders’ assessment of their environment as they plan, prepare, execute, and assess operations, Army and joint doctrines provide frameworks at the tactical, operational, and strategic levels. Army Doctrine Reference Publication (ADRP) 5-0, The Operations Process, includes solid frameworks to assess the tactical and operational environment. The METT-TC (mission, enemy, terrain and weather, troops and support available, time available, and civil considerations; now known as mission variables in doctrine) is a simple mnemonic that, for years, has helped leaders prioritize and analyze the environment at the tactical level; it has enabled them to better understand the environment they are working in. Similarly, PMESII-PT (political, military, economic, social information, infrastructure, physical environment, and time) is a framework of variables for the operational environment. At the strategic level, the U.S. Army War College teaches a strategy formulation framework

Figure 1. Enterprise Influence on the Three Levels of Warfare
consisting of ends, ways, means, and risk to address strategic problems. These commonly accepted frameworks enable Army leaders to approach problems in a structured way and to make sense of their environment.

But the enterprise environment is often unfamiliar to people working on problems at this level. The previous tactical and operational experiences of majors, lieutenant colonels, and colonels are often not enough to orient them to their first assignment at the Pentagon or in the Army generating force. Leaders are frequently disoriented when their tactical and operational experiences seem no longer relevant. They do not effectively engage in their enterprise activities, and they contribute little until they have developed their own frames of reference. Frustrated and disoriented, some officers will routinely disparage the bureaucracy and seek a return to areas of comfort.

In general, leaders’ previous environmental frameworks do not apply in their new enterprise environment. The METT-TC might help them understand, visualize, and describe the environment for a mission to defend a bridgehead or defeat an enemy on an objective. But it does not help staff officers tasked with adding a new type of unit to the Army force structure or with implementing a new policy on gender integration. Similarly, the PMESII-PT may help them understand the environment as they seek to neutralize an insurgency or provide humanitarian assistance after a disaster. Yet, it does not help with enterprise-level issues such as changing overseas force posture (read, rebalancing) or buying the next Army combat vehicle.

A common framework for understanding the enterprise environment, as for those used for the mission, operational, and strategic assessments, would assist Army leaders to navigate the world of enterprise decisions. It should help them understand how to accomplish missions and align tasks to achieve enterprise objectives. A similar, simple acronym could serve as a mnemonic; it would identify a framework accessible to those dealing

![Figure 2. The Army Management Framework](Figure from AR 5-1, Management of Army Business Operations, November 2015)
Authorities are individuals, regulations, or laws that obligate or allow a leader to take action. Law, policy, and regulation delegate these powers to specific offices or positions; people occupying those positions are responsible and accountable for wielding the authority. Title 10 is the most important source of authority for Army enterprise leaders. Title 10 specifically describes the roles and functions of specific offices and positions in the DOD. In addition to the law, policies and regulations also describe authorities needed to work in the environment.

Players are the stakeholders who are responsible for, or can influence the activity of concern. Relationships with these organizations and specific people are important; they should be cultivated. Leaders should identify key areas of interest and concerns of the important players; they should consider the proposed new activity through others’ points of view.

The Army War College teaches a system to assess players by their power and interest over a particular issue or initiative. The first step is to identify the players that influence this issue or initiative. This identification requires a knowledge of the field and the ability to think broadly about the issue. Once leaders identify the players, they can assess the players on two axes—power over and interest in the issue—to formulate a strategy for communicating with these players. For example, players with both power and interest need to be closely managed, players with power but little interest need to be kept satisfied, players with interest and little power need to be kept informed, and players with little power or interest can simply be monitored to be aware if they don’t develop interest or power (see figure 3, page 69).

Processes are “a series of actions or activities taken to achieve a particular end.” Organizations establish processes to control complex activities that they execute more than once. Processes reduce the variability of outcomes, allow standardization to facilitate onboarding of new members, and provide all players with a common understanding of how things should work. The U.S. military relies on many processes to support enterprise activities; leaders need to understand these processes and to know how they interact with one another. Enterprise processes that support the Army’s requirement to provide trained and ready units to the combatant commanders

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
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<tbody>
<tr>
<td>Authorities</td>
<td>Every enterprise activity includes power and authority structures around it. · What are the laws, policies, and regulations related to the activity? · What direction/guidance do they provide? · Who has the legal authority to take action in this environment? · Where does the actual power reside?</td>
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<tr>
<td>Players</td>
<td>· Who are the people and what organizations care about and/or can influence the activity? · What are their positions on the proposal? · How might they support or resist the proposal? · How can you elicit their help on the issue, or at least persuade them to remain neutral?</td>
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<tr>
<td>Processes</td>
<td>· What are the established processes for addressing your action? · How are these processes governed? · What are their timelines and entry points? · Who controls the timelines and entry points for the processes? · How do the processes interact? · Is utilizing the existing process(es) the only option?</td>
</tr>
<tr>
<td>Leverage Points</td>
<td>Every system has points of leverage where actions can have the most impact (e.g., decisive place and time). · Who can influence the activity? · When is the right time to facilitate a change? · What are the appropriate actions to make a change? · Who should execute the action to minimize resistance and to get it accepted by the whole team?</td>
</tr>
<tr>
<td>Evaluation Criteria</td>
<td>· How do you know if the action is successfully achieving its intended purpose? · What are the outcome metrics that can help you validate success? · What are the measures of effectiveness to assess whether your action is working as designed? · What are the measures of performance to assess efficiency?</td>
</tr>
<tr>
<td>Work-arounds</td>
<td>· What work-arounds can enable leaders to implement change quickly? · How can they circumvent existing processes to achieve a desirable outcome? · What are the downsides to working outside the system? · How can you mitigate these downsides?</td>
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(Table developed by authors from ADRP 5-0, The Operation Process, May 2012)
include force development, force management, resourcing, requirement development, acquisition, manning, equipping, training, and sustaining. The Army Force Management School at Fort Belvoir, Virginia, teaches many of these processes. How the Army Runs: A Senior Leader Reference Handbook describes most of these processes and explains how they work in practice. Often there is a significant difference between how the process is supposed to work and how it works in practice.

Once the important processes related to an activity are identified, the key attributes of the process must be mapped out and described. The “black box” of the process that transforms inputs into outcomes is difficult to grasp, especially in more complex systems. The answers to the following questions may help identify leverage points:

- How is the process designed to work and how does the process actually work?
- What are the entry points to the process, and what is its normal timeline?
- Is the process event driven, time driven, or condition driven, or is it a combination of all three?
- Which players make decisions in the process? Who are the gatekeepers who control entry?
- How do all of the different processes that impact the activity interact?
- Are processes executed in sequence, or can they proceed in parallel?

Leverage points enable leaders to move the system toward the desired outcome. They can be specific players and relationships among them, steps in the process, or conditions in the system. By definition, they are the points where efforts can have the biggest impact on effecting change. Leaders should evaluate the enterprise system to identify how, who, where, and when they can best influence the outcome.

Different leverage points require different types of actions. For example, a senior leader-advocate of an action can frequently smooth the way forward. If the right leader supports an activity, his or her influence could dramatically speed processing. Alternatively, a leverage point might be a specific entry point to a process. A successful course of action is responsive to key meetings; it is paced to satisfy specific process requirements. Leaders who understand leverage points can concentrate their actions to prepare the environment, influence the players, and increase the likelihood of the initiative flowing smoothly through the processes. Identifying leverage points assists leaders in developing options and shaping their courses of action.

Doctrine emphasizes the importance of assessing the environment to modify actions to achieve outcomes and to identify better risks and opportunities. Evaluation criteria enable enterprise leaders to determine whether efforts are moving the system toward desired outcomes. Doctrine identifies measures of effectiveness. These measures help assess whether desired outcomes are being achieved. Likewise, measures of performance indicate how well the process is delivering outcomes. Effectiveness, achieving desired outcomes, and efficiency—doing so at an appropriate cost—are important in
the enterprise. Selecting the right evaluation criteria and building helpful feedback loops assure that efforts have a greater impact. They increase the likelihood of success.

Even in the best environment, current processes may be too slow and important players may resist change. In his 2011 address to West Point cadets, then Secretary of Defense Robert Gates challenged the Army to “break up the institutional concrete, its bureaucratic rigidity.” Work-arounds enable leaders to effectively tailor the system to produce a single-iteration outcome. But the bureaucratic system quickly seeks to return to its previous state. While work-arounds may expedite the system and can overcome bureaucratic inertia, they can create drawbacks. Existing processes often develop powerful antibodies that attack work-arounds that might weaken the system or jeopardize a given player’s position within the process. When choosing a work-around, a team should anticipate such a reaction and develop actions to mitigate and lessen their effects. If the use of work-arounds become prevalent, this is indicative of the need to change the process. The strategic environment is inherently dynamic and complex. APPLE(W) can identify feedback loops among its components. Accordingly, leaders may have to initiate multiple iterations of work-arounds in their quest for desired outcomes.

**Example: Fielding the Stryker Brigade Combat Team**

An application of APPLE(W) to a historical enterprise action is instructive. Consider the successful enterprise-level action of the Army’s fielding of the Stryker brigade combat team. A Stryker brigade is a medium-weight force, more deployable than formations of Abrams tanks and Bradley fighting vehicles, and more survivable than light infantry. Stryker units were conceived, designed, and fielded relatively quickly at the turn of this century. The period of time between then Army Chief of Staff Gen. Eric Shinseki’s first transformation address in 1999 and the deployment of the first Stryker brigade in 2003 was only four years. This was an amazing short time for the Army to field new combat units of this size and complexity. Shinseki had to work with many players when establishing the Stryker brigade. He had to manage, satisfy, inform, and monitor internal and external stakeholders. Inside the Army, many stakeholders were concerned about the future of Army force structure. Armor leaders were concerned that a medium-weight brigade might assume many of its key missions; they engaged in a vigorous debate in Armor, their professional magazine. Other internal players included TRADOC, which was responsible for developing the concepts and doctrine for the new unit and ensuring the unit design included important capabilities. The U.S. Army Forces Command was another important internal player; it was the command responsible for providing trained and ready units to the combatant commanders. Others included acquisition
The Army and DOD have processes that develop promising new ideas from concept to reality. Even so, critics lament the DOD’s cumbersome bureaucracy.

employed them to support the objectives, and the Army had to address their main concerns. Shinseki's rationale for the Stryker brigade emphasized the units’ rapid deployability. Their capabilities filled a perceived gap in survivable firepower that could quickly get to where it was needed. This gap was observed by many leaders in the 1990s during Desert Storm, as well as operations in Bosnia and Kosovo. So Shinseki scrupulously ensured that DOD leaders and combatant commanders understood why he was proceeding with transformation.

While the Army and the DOD are part of the executive branch with the president serving as commander in chief, Congress is arguably the most important stakeholder from a resourcing perspective. In its oversight role, every year it authorizes activities through the National Defense Authorization Act. More importantly, it has the power of the purse and appropriates funds for all Army activities. Shinseki needed to ensure that Congress understood his plan. Congress needed to align resources with the Army initiatives and sought-after capability outcomes.

The Army and DOD have processes that develop promising new ideas from concept to reality. Even so, critics lament the DOD’s cumbersome bureaucracy. The DOD does rely on many bureaucratic processes used to run an organization of over two million people (active, reserve, and civilian components) with an annual budget of approximately $600 billion. The DOD bureaucracy is designed as a control mechanism to enable leaders to manage this enormous department and to avoid wasteful spending, as well as to prevent pursuit of incomplete or ill-formed ideas. These processes are complex and complicated; they can easily grind the uninitiated to a halt.

Some of the most important processes for fielding a new capability such as the Stryker brigade include the Army concept development process; the force design process; the force management process; the Joint Capabilities Integration and Development System; the Planning, Programming, Budgeting, and Execution process; and the Defense Acquisition System. Each of these processes operate in accord with the governing documents for their operations. These documents assign responsibilities and authorities, provide the required information, and prescribe standard timelines.

Shinseki’s career background provides a solid grounding in each of these processes. He served as a force integration officer at the Pentagon while a lieutenant colonel, working on force design and building new organizations. Subsequently, he served as an Army director of training, where he learned the enterprise’s role in training the Army. In his final assignment before becoming chief of staff of the Army, he served as the vice chief of staff. In this role, he represented the Army at the highest level in these processes, where he gained a clear understanding of the requirements and timelines. These experiences enabled him to expertly manage their interactions and to use processes to his advantage to expedite bringing his big ideas to fruition.

Because Shinseki understood the processes and players, he could easily identify leverage points to expedite the processes. He knew when he needed approved requirements to lock in funding that facilitated timely allocations. He made a concerted effort to communicate his transformation agenda and sought buy-in from important advocates. He identified potential adversaries in the Armor community, then worked to get them on his side. Shinseki exploited these critically important leverage points to make a new concept a reality.

The Army has some criteria to assess unit readiness. Shinseki used all of them to assess the progress
of the Stryker brigade. The Army measured personnel and equipment fill rates. The Army also measured the performance of the Stryker brigade in training environments and validated its success. In the end, the performance of the Stryker brigades during combat in Operations Enduring Freedom and Iraqi Freedom was the key measure of success.

To field the Stryker so quickly, the Army used some work-arounds to support the system.38 The Stryker team used locally produced doctrine; it borrowed vehicles from Canada; it executed actions outside of standard processes to expedite fielding. To account for these work-arounds, Shinseki put key leaders in important positions to make it happen. Maj. Gen. James Dubik was appointed TRADOC’s deputy commanding general for transformation, and TRADOC created a brigade coordination cell at Fort Lewis to synchronize enterprise actions supporting the new unit.39 These actions contributed to the successful design of the new unit. The unit also executed an aggressive training schedule, even before it was fully fielded with its new equipment. The Army chose to equip the Stryker brigade with existing Canadian systems to expedite the acquisition system. As the new system went through testing, they modified the equipment requirements and unit tactics.

In November 2003, four short years after announcing his transformation initiative, 3rd Brigade, 2nd Infantry Division deployed in support of Operation Iraqi Freedom as the Army’s first Stryker brigade. Its successful deployment provided a new capability and expanded options for the operational commander. The fast-moving medium-weight Stryker force, with more dismounted infantry than a light brigade, proved its worth on the battlefields in Iraq.40

Clearly Shinseki had a good understanding of the enterprise components that he exploited to achieve his transformation initiative. The Army could not have fielded the Stryker brigade as smoothly and as quickly as it did without this understanding. While Shinseki did not have the APPLE(W) framework to undergird his understanding, he used every element of it to describe his environment and to synchronize actions of players across the Army.

Conclusion and Way Ahead

This article began with a discussion of NSPS, a failed DOD initiative to change the enterprise. The architects of NSPS made mistakes in implementation that may have been avoided by a better understanding of their environment. The APPLE(W) provides a framework for that environmental assessment. But just as a METT-TC analysis will not guarantee tactical success, using the APPLE(W) will not guarantee the success of an enterprise initiative. However, it does provide leaders a helpful way to think about their environment. By itself, the APPLE(W) framework does not empower enterprise leaders to make the elusive “perfect” decisions or enable new staff officers to give expert advice. However, this simple framework does provide a mnemonic and a framework for scanning and understanding the environment. This can enable Army leaders to operate effectively at the enterprise level. Incorporating this framework into leader development, training, and education can make a positive difference.

Notes

5. The DOD once defined the enterprise level as “relating to policy, guidance, or other overarching leadership provided by OSD [Office of the Secretary of Defense] officials and the Chairman of the Joint Chiefs of Staff in exercising authority, direction, and control of their respective elements of the Department of Defense on behalf of the Secretary of Defense.” DOD Directive 8000.01, Management of the Department of Defense Information Enterprise (Washington, DC: U.S. Government Printing Office [GPO], 10 February 2009), 10, quoted in Allen and Woods,
“Developing Army Enterprise Leaders,” 45. However, the most recent version of the DOD Directive removed this definition.


8. Ibid., I-7. This figure is expanded from figure 1-2.

12. Ibid.
13. Ibid.
15. Ibid., I-7.
18. ADRP 5-0, 1-7–1-9. This table is an analog to the tables for operational and mission variables.
21. Ibid., 3.
26. Ibid., II–11.
31. The letters section in Armor magazine, the journal of the U.S. Army armor branch, contains many heated discussions after Gen. Eric Shinseki announced transformation. See the first few issues of the year 2000, in particular, to read and understand how some in the branch view transformation as an attack.
34. See, for example, Robert Gates, “Why Bureaucracies So Often Fail Us,” chap. 1 in A Passion for Leadership: Lessons on Change and Reform from Fifty Years of Public Service (New York: Alfred Knopf, 2016), 4–22.
37. Shinseki’s efforts include presenting his ideas at the annual armor conference, establishing the Armor Center at Fort Knox, Kentucky, as the center for the study of transformation. For details see Harold Kennedy, “Army Approaches Decision on Interim Combat Vehicle,” National Defense, September 2000; B. B. Bell, “Welcome to the Future at Fort Knox,” Armor 109, no. 2 (March-April 2000): 5.
39. Ibid., 5.
40. Ibid., 67–71. “Analysis” describes the successful mission of the first deployment of Strykers to Iraq.