

Reforming Pentagon Strategic Decisionmaking

By Christopher J. Lamb and Irving Lachow

Key Points

Decisionmaking in the Pentagon is intrinsically difficult, but the growing consensus is that reform is both necessary and possible. The chorus of voices calling for reform reached a crescendo with the 2006 *Quadrennial Defense Review Report*, which gives unprecedented priority to this objective.

Yet the Pentagon's large and powerful bureaucracy and complex operating environment pose daunting obstacles for even the most knowledgeable, experienced, and determined leaders. Decision support processes designed to be rational are anything but that, and attempts by Pentagon leaders to compensate for this situation often make the problem worse. Furthermore, intuitive decisionmaking support that could improve strategic decisionmaking is ignored on the erroneous presumption that it is illegitimate.

Reforming Pentagon decisionmaking requires focusing the process on the Secretary's strategic agenda; improving rational decision support provided by the contingency planning and resource allocation systems; and refining senior leader intuitive decisionmaking capability with exercises and simulations.

These reforms cannot be implemented by fiat. The Pentagon needs a new organizational construct that would be an "honest broker" for improving decisionmaking support. It would be empowered to provide standards and products for both rational and nonrational decision support and would use collaborative teams that draw upon expertise from across the Pentagon's functional and regional organizations.

Implementing such reform would be difficult, but no more so than the training revolutions that the Services instituted in the 1970s to improve decisionmaking in conflict. The same leap forward at the strategic level is possible, and those who go in harm's way deserve nothing less.

The recent 2006 Department of Defense *Quadrennial Defense Review* (QDR) Report to Congress gives a surprising prominence to decisionmaking reform. Prior to the 2006 QDR Report, Pentagon leaders thought reforms they made between 2001 and 2005 were sufficient to produce major shifts in military capabilities that would move the Department of Defense (DOD) into the 21st century.¹ Yet by the time Pentagon leaders finished the report, they believed strategic decisionmaking reforms were one of only two fundamental imperatives for DOD to emerge from the QDR (the other being the need to continue efforts to reorient military capabilities toward new threats).²

The importance of good strategic decisionmaking in matters of peace and war is easy to understand but difficult to achieve. At a minimum, it requires reforms that modify both senior leader decisionmaking styles and organizational support. We begin this paper by identifying prerequisites for good decisionmaking. We then describe problems and conditions that currently diminish the quality of Pentagon decisionmaking and close by making a case for a new decision support capability that would improve Pentagon decisionmaking.

Blink and Think

It is commonly assumed that people can and should make decisions as rationally as possible. Rooted in economic theory, rational actor models postulate that people make decisions by identifying and comparing options to determine which one produces the optimal outcome for a given set of circumstances. While the rational actor model has generally done a good job of explaining human

decisionmaking in the aggregate, close observation of human behavior clearly demonstrates that people rarely act in a purely rational manner. Often, people use a variety of mental shortcuts to simplify and speed up their decisionmaking.³ Thus, people exhibit "bounded rationality," which not only helps them make decisions but also introduces a range of nonrational psychological factors into their thinking.

An otherwise rational decisionmaking process may be limited by many factors specific to individual decisionmakers, the organizations they inhabit, or their broader decisionmaking environment. Here we concentrate on the forces that most influence senior leaders in the Pentagon, including organizational affiliation. One model based on affiliation notes that organizations create environments that "adapt" members so that they further the organization's goals. They do this by:⁴

- dividing work among members and/or subunits
- controlling access to information
- providing standard operating procedures
- creating an organizational culture that promotes a specific set of values and norms
- establishing a formal chain of command for promulgation of authority and communications
- establishing programs for training and indoctrinating new members.

As a result of these behaviors, organizations increase the likelihood that individuals will make decisions consistent with the organization's interests and predispose individuals to decisionmaking shortcuts that limit their ability to make rational decisions.

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For a long time, experts viewed deviations from the rational ideal as something to be minimized, corrected, and eliminated if possible. The presumption was that any reduction in rationality degraded the quality of decisions. Recently, however, psychologists and scientists researching human decisionmaking have concluded that people using mental shortcuts can produce good decisions in difficult circumstances. One of the most popular nonrational theories of decisionmaking, which can be dubbed the “intuitive model,” proposes that people make decisions by recognizing situations, matching them to previously experienced situations, trying out various solutions in their heads by running “What if?” mental simulations, and then picking the first solution that is good enough to satisfy the problem at hand.⁵ This is the model that was popularized in Malcolm Gladwell’s *Blink*. In this model, biases and rules of thumb are not deviations from an ideal approach, but rather mental adaptations that should be celebrated for enabling people to make quick, accurate decisions.

Blink’s popularity stimulated a defense of rationality and a resultant “blink vs. think” controversy that captured popular imagination.⁶ While the clear consensus among experts is that people use both intuitive and rational techniques to make good decisions, it is true that some problems drive people toward one approach or the other. In general, the more fact-based a given decision, the more likely one is to use a rational model. For example, estimating the number of enemy missiles can largely be a fact-based exercise that draws upon evidentiary methodologies, even if it must account for significant uncertainties.

In contrast, the more a decision involves tradeoffs among incomparable factors, especially values or beliefs, the more likely one is to rely on intuition. For example, a politician may be faced with the choice of voting on a bill that is supported by congressional leadership and will benefit the country as a whole but that will anger constituents and possibly hurt chances for reelection. The politician will likely reach some kind of intuitive decision

based on years of experience dealing with voters, colleagues, and the media.

Other key criteria influencing how someone makes a given decision are circumstantial.⁷ People generally rely on their intuition when:

- they are facing a time-urgent situation. In extreme situations, such as firefights and battlefield triage, even short delays caused by reasoning through a formal decisionmaking process can result in disastrous outcomes.

- conditions are dynamic or goals are ambiguous. If a situation is changing rapidly, then it makes sense to focus on a satisfying (that is, good enough) solution that can be found quickly. One can reevaluate the situation when it changes and identify a new solution if needed.

using mental shortcuts can actually produce a good decision in difficult circumstances

- they have a great deal of relevant experience. Because intuitive decisionmaking relies on a person’s ability to match a given situation to previous situations one has seen, the more relevant experience one has, the more likely one is to use intuition and use it effectively.

- the problem can be modeled in mental simulations. Intuitive decisionmaking requires people to run mental simulations on what might happen if a given option were chosen. People can do this for a wide range of problems, some of which are fairly complex. For example, one study found that Navy commanders serving on Aegis cruisers use intuitive decisionmaking for 95 percent of their decisions.⁸

In contrast, people generally use a rational process when:

- they are not under heavy time pressure. Stepping through a rational decisionmaking process takes more time than simply following a flash of insight. With more time, people are more likely to follow the rational approach, if only to verify an initial gut feeling.

- conditions are relatively stable and goals are clear. If a situation is not changing rapidly relative to the time needed to make a decision, then a rational approach to find an optimal solution to the problem can be used.

- they do not have a great deal of relevant experience. If decisionmakers’ experiences are not applicable to a given situation or insufficient to provide a basis for pattern matching, they should (and usually do) resort to a more rational model to guide them through problem formulation, option identification, analysis, and selection of a solution.

- the problem is computationally complex. Although human beings have a remarkable ability to use intuition in complex circumstances, at some point complexity overwhelms the ability to grasp a given situation. At that point, the quality of decisions erodes along with the ability to recognize situations or run mental simulations.

Despite different models and categories of decisionmaking, the reality is that decisionmaking style falls along a continuum. Pure reason and intuition are only antithetical at the far ends of the spectrum. In most cases, people make decisions with a combination of reason and nonrational mental shortcuts. For example, people often use intuition to bound the range of possible solutions for a problem that will be analyzed with a rational approach. Similarly, they frequently use formal steps from the rational model to augment or verify their initial intuitive judgments.⁹

How does the way people make decisions relate to decisionmaking in the Pentagon? First, any attempt to reform strategic decisionmaking in the Pentagon must fully account for the way senior leaders make strategic-level decisions. Furthermore, prescriptions for improving senior leader decisionmaking must accommodate rational, nonrational, and intuitive decisionmaking, depending on when these types of decisions are likely to generate better outcomes.¹⁰ When rational decisionmaking is appropriate, efforts to limit the factors that bound rationality make sense. When rationality is either impossible or irrelevant, it is appropriate to support intuitive approaches to decisionmaking.

Challenges

Pentagon decisionmaking reforms since World War II are largely a history of efforts to curtail the power of the Services to veto joint solutions that serve the entire military better.

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The Services inculcate members with habits and perspectives—cultures that are beneficial for warfighting but that can be counterproductive at higher levels of decisionmaking where integration of effort is required. Secretary of Defense Robert McNamara's Planning, Programming, and Budgeting System (PPBS) was installed in 1961 as an effort to rationalize Pentagon decisionmaking by introducing broader, more transparent, and more objective decision criteria.

Although modified frequently, PPBS survives to this day because it is essentially rational, benefiting Pentagon decisionmakers for several reasons. First, the infrequency of war militates against intuitive decisionmaking on war preparation (as opposed to making decisions in the heat of battle). There is not a large experiential basis for making intuitive decisions about what investments will produce the best mix of capabilities for warfighting. Second, the high stakes involved in deterrence and war argue for the adoption of rational processes that identify and weigh all possible risks. Third, many Pentagon planning problems are so complex that they defy intuitive judgment alone. Increasingly, this is the case as integrated joint warfare becomes the norm in mission areas such as command and control, logistics, and missile defense. Fourth, there is usually sufficient time to allow a rational process to unfold. Even though the security environment is increasingly dynamic, assumptions can be made that will hold long enough to justify planning; the assumptions just have to be revisited more frequently. No instantaneous decisions based on intuition alone are normally required, occasional pop-up crises notwithstanding.

For these reasons, the resource planning and allocation systems designed to support senior leader decisions are ostensibly methodical and engineered to minimize risk: objectives are defined; conditions that inform the objectives are identified; alternative ways and means to achieve the objectives are explored; multiple expected and possible unintended consequences are considered; and decisions are made, generally to eliminate as much risk in as many categories as possible. The same holds true for the Pentagon contingency planning system and its modifications over the years, all of which were designed to centralize and rationalize contingency planning guidance and the war plans review process. The rational design, however, has not been rationally implemented.

Limits to Decision Support. To execute its ostensibly rational planning processes, the Pentagon is divided into hierarchical organizational structures that represent relatively narrow bodies of expertise (policy, intelligence, program analysis, acquisition, and budgeting). Within these bodies are subdivisions that further specialize in more narrowly defined subjects. Recently, Pentagon wits have taken to calling their stovepiped organizations “cylinders of excellence,” which is in fact what they are. Their purpose is to build and nurture deep expertise in a narrow body of knowledge. These experts identify issues, devise options and recommendations, and forward them up the chain to senior officials. In this regard, planning and decisionmaking are essentially bottom-up and stovepiped.

Secretaries need integrated decision support, but they do not have the time to produce it themselves, and they do not receive it

For example, a war plan is initially generated by lower ranking officers in a combatant command who coordinate the product up through the four-star leader of that command. The plan then passes to the Joint Staff and then to the Office of the Secretary of Defense, where this bottom-up process is repeated within those staffs until the plan is placed before the Secretary. On occasion, this Sisyphean process is executed in parallel, or one or more organizations are cut out of the process, but it is essentially bottom-up. The same thing holds true for military requirements and resource allocation issues, which are generated primarily by lower ranking staffs and move upward until approved by senior leaders.

The value of these rational decision processes is limited by multiple bureaucratic and human factors. The Secretary and other senior leaders need integrated problem assessments and solution options, but their subordinates have few incentives to collaborate in order to provide such products. Instead, subordinates are rewarded for developing and protecting their organizational equities. Since there is no incentive to sacrifice organizational equities for the common good, the natural outcome of a formal

coordination process in the Pentagon is a least common denominator or consensus product for senior leaders that avoids and obscures the need for tough tradeoffs.

The bureaucracy's penchant for producing watered-down consensus products encourages talented and highly motivated officials to get their positions directly to senior decisionmakers by circumventing the formal coordination process or by leaking dissenting views to the media. Proposals presented this way often are clearer and more creative but invariably reflect a limited perspective that does not benefit from access to all relevant information. Lack of coordination also means that senior decisionmakers ultimately are presented with multiple recommendations that contradict one another. The competing recommendations may sound plausible, even compelling, but they do not provide sufficient methodological information to help senior leaders make well-reasoned tradeoffs among competing alternatives.

What Senior Leaders Need. For these reasons, Secretaries and Deputy Secretaries of Defense are the first real point of integration in DOD, and they do not like it. They need integrated decision support from the 30 or more subordinate bureaucracies that report directly to them; they do not have the time to produce it themselves, and they do not receive it. Not surprisingly, former Secretaries and Deputy Secretaries of Defense from both political parties are virtually unanimous in the belief that the Pentagon bureaucracy could be substantially cut, from 25 to 75 percent, without any degradation in the quality of decision support.¹¹ Often the Office of the Secretary of Defense is singled out for particularly harsh criticism, but the Joint Staff also hoards information and defaults toward least common denominator products. Colin Powell once remarked that while he was the Chairman, the “sole purpose” of his 1,500-person staff “was to keep as much information away from me as possible, [thinking] let's just give him what we want him to have, not what he needs.”¹² Least common denominator or poorly integrated decision support products are still the norm throughout the Pentagon bureaucracy.

Secretary Donald Rumsfeld made it clear from the beginning of his tenure that he would challenge these bureaucratic tendencies. In a speech on September 10, 2001, he called the Pentagon bureaucracy the enemy, arguing it “disrupts the defense of the United States and places the lives of men and women in uniform

at risk.”¹³ The next day, however, the Secretary had to go to war with the bureaucracy he had, not the one he wanted. Therefore, he uses workarounds to tame the bureaucracy, some similar and some dissimilar to those of his predecessors. Some of these workarounds may contribute to criticism of the Secretary’s leadership style. Critics note that although Secretary Rumsfeld emphasizes the need for flat organization, maximum delegation, collaboration, new ideas and innovation, some of the methods he employs to control the bureaucracy undermine these objectives.

For instance, the Secretary relies heavily on a few trusted aides who are able to offer alternatives to the bland or contradictory decision support provided by the bureaucracy. Unfortunately, doing so helps convince lower-level officials that having access to senior leaders and controlling information flow are keys to success, which further discourages information-sharing and collaboration. The fact that senior leaders often do not provide feedback to subordinates compounds the problem. If the recommendations of subordinates are not accepted and they do not understand why, many will conclude that senior leaders made the wrong choice for the wrong reasons, further deepening their cynicism. In this way, the bureaucracy and senior leader decision styles reinforce one another and undermine the quality of the Pentagon’s rational decision support processes. Thus, strategic decisionmaking remains more personalized, centralized, and idiosyncratic than it should be, devoid of the ability to test hypotheses and see all reasonable alternatives.

Another example of the Secretary’s informal war on the bureaucracy is his use of short inquiries to stimulate creative, holistic thinking at all levels of the Pentagon. The Secretary bombards Pentagon staff with short missives (called “snowflakes” by those they descend upon). One characteristic of the Secretary’s thousands of snowflakes is that they ask questions that can reasonably be answered only with information from multiple organizations. Snowflakes irritate the staff because they are difficult to answer, but from the Secretary’s point of view they serve as a frequent reminder of his broad field of vision and the scope of his requirements for effective decision support. While they generally have that effect, they do little to change the bureaucratic incentives that drive behavior in the Pentagon.

The Secretary also has tried to invert Pentagon processes so that top-down, integrated strategic decisionmaking is more the norm. Toward this end, he often summons top leadership (an assembly of four-star equivalents) in a body known as the Senior Leader Review Group to make collective decisions about the strategic agenda. This group helps set priorities and provide direction, but it still serves more as an information-sharing and consensus-building forum than a decision body. This is the case partly because there is no crosscutting, high-quality decision support to the Senior Leader Review Group. Without sharp, transparent, and collaborative decisionmaking support, individual senior leaders tend to fall back on what they know best—their own organizational equities—and not to support strategic trades that would serve the larger military enterprise well.

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In short, the Pentagon’s ostensibly rational decisionmaking system remains much more bureaucratic than rational, which reduces its value to senior leaders. These bureaucratic forces undermine strategic management by overwhelming the Secretary with issues of marginal importance while obscuring the information needed to make fundamental strategic choices about opportunities and risks. This is why, regardless of the major changes in the strategic environment over the past decade, the formal Pentagon decision processes do not shift more than a few percent of the Pentagon’s budget from one capability area to another in any given year, a fact that held true in the 2006 QDR.

Balancing Rationality and Intuition. Even if the rational planning and resource allocation processes of the Pentagon worked better, they would be insufficient for good

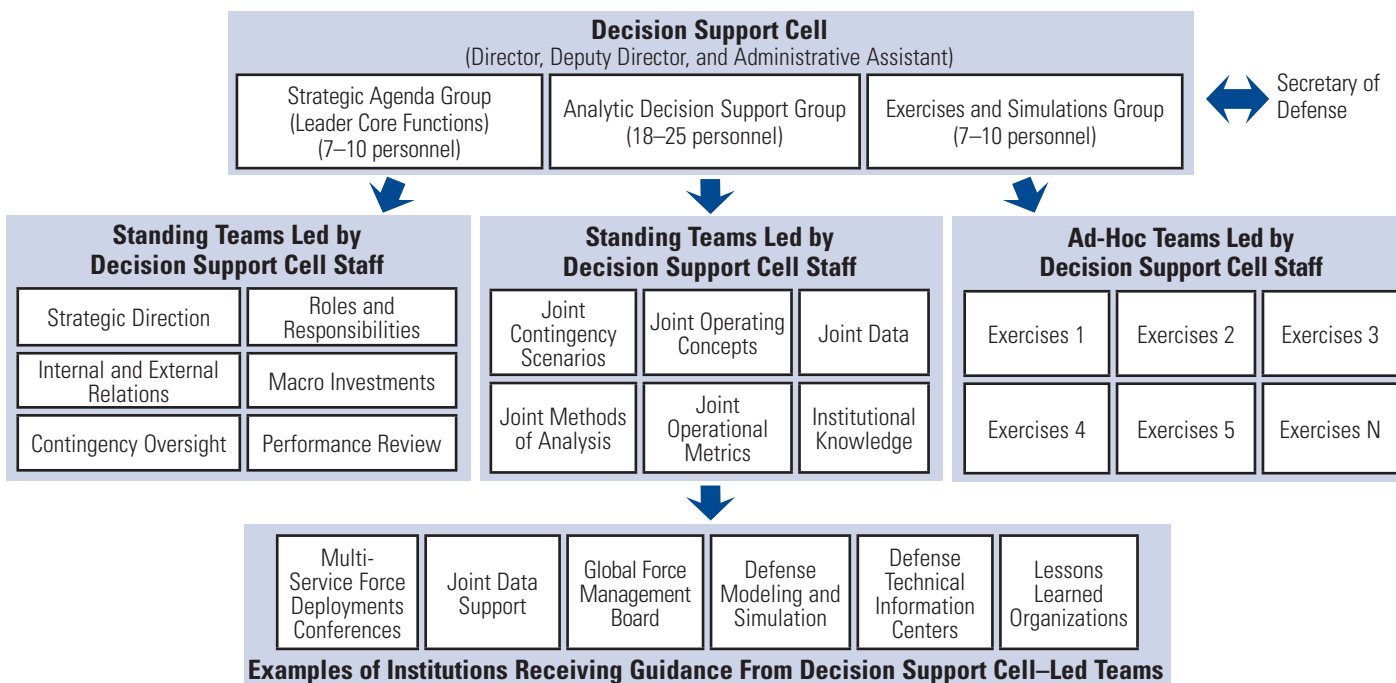
strategic decisions. Senior leaders must make decisions that account for a broader range of factors than those found in the analyses conducted by lower-level officials. Sometimes the range and significance of these factors are so great that they dwarf the marginal utility of supporting rational analyses. Even if the results of the rational analyses offer valuable insights, senior leaders ultimately must still compare and contrast choices across diverse value sets (operational, political, and economic). It is difficult to compare rationally the value of better relations with a key ally, less friction with a powerful Senator, more economical shipbuilding, and a better fighter plane radar. To do so successfully requires heavy reliance on intuition, judgment, and other nonrational factors.

This is not to say that there is no role for rational decision support. Senior leaders must rely in part on their intuitive understanding of the net effect of their decisions across multiple objectives, but they ought to do so while taking advantage of decision support that can better inform their intuition. In practice, this means there are two critical elements required for effective strategic decisionmaking in the Pentagon: clear, transparent, and well-coordinated rational analyses of alternatives from the decision support system; and well-honed personal intuition and judgment. These two elements can best be harmonized through the creation of a Decision Support Cell.

Decision Support Cell

A Decision Support Cell would be a dedicated staff located within the Secretary’s office whose mission would be to enforce a degree of discipline and collaboration in strategic decision support for the Secretary and his closest advisors. It needs to do three things. First, it should help the Secretary focus the decision support process on his strategic agenda and make sure he receives integrated supporting products and provides necessary feedback and direction. Second, it should improve the quality of the decision support routinely provided by the contingency planning and resource allocation systems, making sure underlying assumptions are clear and that all viable alternatives are rigorously examined. Third, it should help senior leaders refine their intuitive decisionmaking with exercises that

Decision Support Cell Structure



enlarge their experience base and allow them to question their predilections in a controlled environment.

The cell could undertake these functions with 35 to 50 interdisciplinary staff members who rotate into the cell for limited appointments from inside and outside the Pentagon. The cell's staff should conduct the majority of its business by leading teams of experts drawn from diverse Pentagon organizations. The staff would seek to generate collaboration among experts to produce integrated decision support for senior leaders. To obtain such collaboration, the cell's leadership would have to be seen as loyal to the Secretary's strategic agenda but scrupulously even-handed in the way it supports that agenda. Thus, the cell's leader should be a political appointee chosen by the Secretary with a transparent public mandate and set of authorities to execute the cell's three functions as follows.

Focusing Strategic Decisionmaking.

The 2006 *QDR Report* underscored the importance of senior leaders focusing on a set of core functions that only they can perform effectively,¹⁴ including:

- providing strategic direction by setting priorities
- assigning responsibilities and authorities to key subordinates
- making major resource investments
- explaining key objectives and methods to internal and external audiences
- monitoring performance and make necessary adjustments.

The Secretary and his core leaders should focus on these functions. Instead, they are often sidetracked by day-to-day crises. Some crises demand senior leader attention, but often senior leaders fail to focus on strategic planning and choices for lack of integrated, quality decision support. The Decision Support Cell should be charged with ensuring the collaboration among Pentagon bureaucracies necessary to put issues in a strategic choice framework. In doing so, the cell would not usurp the functions of other staff elements but rather undertake integrating activities in support of these core functions that are currently left to the Secretary to do himself or are not done at all.

For example, the Decision Support Cell could work with diverse elements of the bureaucracy to identify critical elements for success in each core function and alternative approaches for integrating those elements into a successful strategy. After presenting the findings to the Secretary and his senior advisors and receiving their guidance and approval, the Decision Support Cell would synchronize the execution of the strategy by aligning internal decision support with external forcing functions, such as budget submissions and high-level meetings with foreign leaders. Since the senior leader core functions cut across many Pentagon bureaucracies, the cell would need to ensure that lead organizations or individuals assigned responsibility for critical elements of strategy execution receive the collaboration and information-sharing support that they need to do their job. Periodically, the Decision Support Cell would organize briefings to provide senior leadership with an update on progress and outstanding issues so that they could provide corrective guidance.

With a Decision Support Cell to coordinate decisionmaking in senior leader core functions, the Secretary's personal staff would

be free to support his daily schedule and personal needs. Similarly, the Secretary's subordinates could concentrate on their areas of expertise, knowing that the Decision Support Cell would ensure collaboration when the Secretary needed it. Since the cell would have a holistic view of the multiple senior leader core functions, it would be in a position to advise the Secretary on the importance of keeping abreast of these issue areas. It would also be in a good position to remind the Secretary when priorities have to be established in light of limited time, resources, and political support.

Improving Rational Decisionmaking Support. The QDR emphasized the importance of building capacity to inform senior leaders about strategic choices by improving common databases and analytic methods.¹⁵ Much more is needed, however, to improve the quality of the Pentagon's rational decision support processes. Comparing and evaluating alternatives is not possible without a transparent set of baseline assumptions, operating concepts, methods, and data. The Decision Support Cell would need to ensure that all Pentagon elements had timely access to common:

- joint contingency scenarios (that bound assumptions about the problem set military forces must be prepared to handle)
- joint operating concepts (alternative ways to solve problems that military forces must prepare for)
- joint data (common assumptions about enemy, friendly and U.S. forces, their performance, terrain, and other relevant operational data)
- joint methods of analysis (transparent qualitative and quantitative techniques for assessing the risk inherent in alternative means of solving problems and accomplishing missions)
- joint operational metrics (standards for measuring value and risk so that options for reducing or accepting more risk can be identified)
- institutional knowledge (means to retrieve and build upon knowledge so that each question posed is not considered *sui generis*).

Without these common, essential precursors to good analysis provided in a timely fashion so that results are comparable and replicable, senior leaders cannot usefully evaluate alternatives and their consequences. Currently, no single organization has the interest, authority, and resources to produce such timely, quality products for the benefit of all. The organizations that do possess a

plausible mandate to produce these common goods—for example, the Defense Modeling and Simulation Office and the Defense Technical Information Center—report to parent organizations that look first to their own organizational interests rather than DOD needs as a whole. As a result, the foundational products for good decision support are provided too slowly and with insufficient quality and quantity to support a common analytical framework across DOD.¹⁶

The Secretary would need to empower the Decision Support Cell to set standards and timelines for products and to enforce a degree of transparency, collaboration, and information-sharing among all Pentagon headquarters elements that conduct analysis in support of senior decisionmakers. Exercising this kind of authority underscores why the cell must be independent of any Pentagon component and report directly to the Secretary. If the Decision Support Cell reported to someone lower than

putting an end to this waste of human skills is a necessary step in the Pentagon's transition to a capabilities-based planning approach

the Secretary, it might not be able to enforce the necessary collaboration to carry out its duties. If the cell belonged to an organization charged with conducting analysis, or conducted analysis itself, it would be predisposed to defend those analyses, which would immediately ruin its reputation as an honest broker. The Decision Support Cell must be in a position to illuminate the underlying assumptions and factors behind analysis generated by other organizations for the Secretary. It must understand the analyses without conducting them itself.

Another benefit of a Decision Support Cell with this type of mandate, authority, and resources is that it would reduce a major source of waste. Each year, the Pentagon spends billions of dollars on analytic support that cannot be harnessed in support of senior leader strategic decisionmaking. The situation is so bad that the Pentagon occasionally pays contractors to study *past* studies in hopes of

finding a baseline of authoritative knowledge on a subject. Invariably the answer comes back that the results from many years of expensive studies are not transparent, comparable, or consistent and cannot be explained.

Putting an end to this waste of human skills with a Decision Support Cell is also a necessary step in the Pentagon's transition to a capabilities-based planning approach. Capabilities-based planning is a top-down exercise in comparing the value of alternative capability investments. A top-down, strategy-driven process is only as good as the weakest link, and all the necessary links for comparing alternative capabilities—scenarios, operating concepts, data, methods, and metrics—are currently weak. A Decision Support Cell can change that by providing an authoritative analytic backbone that would make rigorous comparison of alternative capabilities possible.

Improving Intuitive Decisionmaking Support. The Decision Support Cell also needs to be able to support senior leader intuitive decisionmaking by providing leaders with the breadth and depth of experience they need in their jobs:

The key to using intuition effectively is experience—more specifically, meaningful experience—that allows us to recognize patterns and build mental models. Thus, the way to improve . . . intuitive skills is to strengthen [the] experience base.¹⁷

The list of areas where meaningful experience would be desirable is both long and diverse: military operations, executive management, bureaucratic processes, political savvy, government budgeting, media relations, intelligence products and operations, emerging technologies, and so forth. While it would be ideal for all senior leaders to possess a depth of real-life experience in each of these areas before taking office, it is not realistic to expect leaders with such uniformly rich experience.

Senior leaders can gain needed experience on the job. However, relying solely on real-world experience has two downsides. First, gaining experience this way is a time-consuming and inefficient process. Senior leaders with relatively short tenures in government need to develop intuitive decisionmaking capabilities quickly and in areas that meet immediate needs. Second, one of the ways that people learn via on-the-job training is by making mistakes (which is one of the best ways to learn). However,

given the stakes associated with strategic decisionmaking in the Pentagon, such mistakes are often too costly to accept.

A better approach to develop one's experience base in a given area is to use a tailored "intuition skills training program."¹⁸ Such a program must help decisionmakers do three things:

- identify and understand the decision requirements of the job
- practice difficult decisions in context
- review decisionmaking experiences to learn what works and what does not.

The most promising option for practicing difficult decisions in life-like situations is decisionmaking exercises, which are thought experiments, usually built upon well-defined scenarios that attempt to capture the essence of specific decisions. Although often conducted as games, they can also utilize virtual environments that allow players to participate while dispersed at great distances. Decisionmaking exercises should not be confused with large-scale headquarters or field simulations involving dozens or hundreds of players and complex computer models. Each one is a simple, focused event targeted at the characteristics of specific decision: *Well-designed [exercises] can be surprisingly effective at capturing the essence of a tough decision without many of the costs or other overhead of more complicated simulations or exercises. And, they can be usually be done in a much shorter period of time, so you can get more repetitions.*¹⁹

Participation alone will provide Pentagon leaders with new experiences to improve their intuition, but they will learn more quickly if they analyze their decisionmaking after the fact to identify lessons for future reference.²⁰ It is more helpful for people to reflect on how they made a particular decision than on the outcomes of a specific decision, which is often done in games and exercises. The Decision Support Cell can facilitate discussions with senior leaders to achieve this result. In addition to sharpening intuitive decisionmaking skills in areas of particular concern to them, such exercises would familiarize senior leaders with one another and their predilections.

Finally, the Decision Support Cell should help record the results of real-world intuitive decisionmaking. Even though intuitive decisionmaking is idiosyncratic to some extent, and often politically sensitive, the cell must capture

senior leader concerns and desires well enough to help middle management understand the factors that informed the decisions made by senior leaders. Doing so should increase trust in the system and improve the quality of decision support. Middle managers would see that senior leaders gave their proposals due consideration and made their decisions based on a wider set of criteria than they were able to consider.

Objections

What are the potential objections to a Decision Support Cell? First, some might argue that the depiction of Pentagon decisionmaking provided here is too harsh and that major reform is not necessary. They would note that hundreds of information-sharing bodies exist in the Pentagon that, in principle, could provide integrated support to the Secretary.

the Decision Support Cell must integrate a wider set of expert knowledge for the Secretary than currently resides in any single Pentagon organization

The truth, however, is that such committees can neither reward nor compel a truly free flow of information, nor are they empowered to make team decisions as opposed to producing consensus products. Rare exceptions such as the Joint Improvised Explosive Device Task Force, which improves the collective response to roadside bombs in Iraq but still cannot field end-to-end solutions with all the required support, only serve to highlight the fundamental truth about the prevailing weakness of cross-cutting groups in the Pentagon.

Critics could also argue that senior leaders who really want to dig into an issue can get the information they need. While this is true, it is so energy- and time-consuming that senior leaders often choose to postpone a decision or stick with the status quo. Critics might also argue that recent changes, such as the reform of readiness data in support of Global Force Management, are improving decision support now. However, these reforms are moving too slowly and, in some cases, not at all. This

holds true even in areas such as adaptive planning and capabilities-based planning where the Secretary places a high value on reform. In short, the many blue-ribbon panels over the past decade and the 2006 QDR are correct when they conclude that more strategic decision reform is necessary.

While supporting reform, some might argue that the cell itself is unnecessary. If the core problem is lack of integrated assessments and options, why not just have the Secretary of Defense change incentives so that subordinate organizations collaborate more? Certainly the Secretary must provide incentives for collaboration, but he needs the help of the Decision Support Cell. The cell makes collaboration possible by setting standards and timelines for collaborative efforts, and it reports back to the Secretary when collaboration does not materialize so that the Secretary knows who should be held accountable. In addition, better collaboration does not necessarily improve senior leader intuition.

Another objection is that the Decision Support Cell would be so powerful that its guidelines would unduly restrict analysis conducted by experts in the various bureaucratic offices. In fact, the opposite is true. The point is to ensure that analysis begins with reasonable assumptions and addresses relevant issues, but establishing approved baselines for analysis simply defines the starting point for inquiry. A common and comparable analytic backbone would actually make it easier to explore and evaluate variations on approved baselines. Organizations inside and outside the Pentagon could conduct excursions off the common baseline to explore options in areas of particular interest to them. Since modifications would be transparent and results comparable to the baseline, analyses would be of interest if they revealed hidden problems, new insights, statistically significant exceptions, and wildcard cases that merit the attention of senior leaders. DOD policy has always been to encourage analytic excursions, but such excursions are rarely done because the means to do them quickly and efficiently are not in place.

Still another argument often heard is that the Director of Program Analysis and Evaluation (PA&E) can perform the Decision Support Cell functions. This argument is implausible for two reasons. First, the PA&E mission is to conduct joint analyses to evaluate programs.

Because it conducts joint analyses itself, PA&E cannot objectively serve the role of honest broker that is critical to the successful execution of the Decision Support Cell's functions. It would naturally favor its own findings or certainly be perceived as doing so. Second, PA&E lacks the full range of interdisciplinary skills necessary to conduct cell activities. PA&E personnel specialize in program analysis, not in threat depiction, policy and strategy, warfighting concept development, or other areas of expertise that must be brought together by the Decision Support Cell to support strategic decisionmaking. This is not a criticism, but an inescapable consequence of specialization. The whole point of the Decision Support Cell is that it must integrate a wider set of expert knowledge for the Secretary than currently resides in any single Pentagon organization. In addition, PA&E is neither structured nor staffed to improve intuitive decisionmaking.

Recommendations

The Decision Support Cell is a necessary innovation for DOD and consistent with the 2006 QDR clarion call for institutional reform. Configured with due sensitivity to senior leader priorities, bottom-up analytic support, and intuitive decisionmaking needs, the Decision Support Cell would improve strategic decisionmaking. There are no obvious legal or statutory impediments to its implementation. The main requirement is strong, visionary leadership to overcome vested interests and a conservative bureaucracy's tendency to safeguard the status quo.

If the Decision Support Cell seems like a tall order, we should remember that the tactical military already has achieved the sort of transformation in decisionmaking culture envisioned here. The Services have long understood the value of organizational cultures that support warfighting missions and good intuitive decisionmaking in battle. In the 1970s, however, they introduced objective, empirical feedback into training exercises with the aid of new simulation technologies and after-action reports to

improve learning and future battlespace decisionmaking. The training revolution of the 1970s was not an easy transformation, but it was highly effective because it combined the value of objective analysis of courses of action with the ultimate need for commanders to make intuitive assessments and decisions. There is no reason why the Pentagon cannot do the same thing and implement a Decision Support Cell that balances objective analysis and intuitive wisdom. The Soldiers, Sailors, Airmen, and Marines who fight the Nation's battles deserve nothing less.

Notes

¹ Ryan Henry, "Defense Transformation and the 2005 Quadrennial Defense Review," *Parameters* (Winter 2005–2006), 5–15.

² Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: The Department of Defense, February 6, 2006), 65–66.

³ Lee Roy Beach and Terry Connolly, *The Psychology of Decision-making* (Thousand Oaks, CA: Sage Publications, 2005), 80–83.

⁴ Herbert Simon, *Administrative Behavior* (New York: The Free Press, 1945), 87–117. See also Graham T. Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2^d ed. (New York: Longman, 1999), 143–163.

⁵ We use the term *intuitive model* to refer to a class of models that generally are considered to be "naturalistic," such as Gary Klein's Recognition-Primed Model. Gary Klein, *Sources of Power: How People Make Decisions* (Cambridge: MIT Press, 1998).

⁶ Malcolm Gladwell, *Blink: The Power of Thinking without Thinking* (New York: Little, Brown, 2005); and Michel Legault, *Think! Why Crucial Decisions Can't Be Made in the Blink of an Eye* (New York: Threshold Editions, 2006).

⁷ Klein, 95–96.

⁸ *Ibid.*, 97.

⁹ For a detailed discussion of the interaction between rational and intuitive decisionmaking in a military context, see David C. Gompert, Irving Lachow, and Justin Perkins, *Battle-Wise: Seeking Time-Information Superiority in Networked Warfare* (Washington, DC: National Defense University Press, 2006).

¹⁰ The military Services clearly understand this point. For example, rational and intuitive decisionmaking processes, and the situations where each should be used, are discussed explicitly in Navy and Marine Corps doctrine. See Naval Doctrine Publication 6: *Command and Control* and Marine Corps Doctrinal Publication: *Command and Control*.

¹¹ Exit interviews with departing Secretaries of Defense by the Pentagon Office of the Historian and informal comments from participants in defense reform studies who interviewed former senior leaders.

¹² "Follow the Leader," *Context Magazine*, interview with Colin S. Powell, available at <www.contextmag.com/setFrameRedirect.asp?src=/archives/200002/Feature0FollowtheLeader.asp>.

¹³ "DOD Acquisition and Logistics Excellence Week Kickoff—Bureaucracy to Battlefield," remarks as delivered by Secretary of Defense Donald H. Rumsfeld, the Pentagon, Monday, September 10, 2001, available at <www.dod.mil/faq/comment.html>.

¹⁴ *QDR Report*, 65–66.

¹⁵ *Ibid.*, 66.

¹⁶ Christopher J. Lamb, *Transforming Defense* (Washington, DC: National Defense University Press, September 2005), 4–17.

¹⁷ Gary Klein, *The Power of Intuition: How to Use Your Gut Feelings to Make Better Decisions at Work* (New York: Currency Book, 2004), 36. Emphasis in original.

¹⁸ The description of this training program is based on material in Klein, *The Power of Intuition*, 36–63.

¹⁹ *Ibid.*, 45.

²⁰ This is why the military conducts after-action reviews following tactical training exercises.

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