

A dynamic strategy for uncertain times

A world of fast-changing conditions and heightened uncertainty demands that defense agencies act with speed and flexibility. They can do so by taking an iterative, dynamic approach to strategic management.

Lowell Bryan, Richard Elder, Becca O'Brien, and Scott Rutherford

¹ A defense agency's strategy is the overall plan meant to guide major strategic decisions regarding personnel, technology, readiness, equipment, and infrastructure in support of the country's national security objectives. This strategy should encompass several different time horizons (that is, 1-3, 5-10, 10-20, and 20+ year views). A defense agency's strategy is distinct from onthe-ground military strategy (that is, how to invade or defend) and political military strategy (for example, whether to deploy units).

In this era of unprecedented global uncertainty, defense agencies—ministries and departments as well as armed services and their major branches—must rethink how they develop and manage their strategies.¹ While some aspects of strategic planning (such as procurement decisions for next-generation equipment) require long lead times, fast-changing conditions—ranging from evolving situations in war zones to civil unrest due to governmental destabilization or the global economic crisis—require fast action.

In this article, we propose an approach to strategic management that involves three basic stages: understanding the context, making strategic decisions and weighing risks, and executing amid uncertainty. These stages will be familiar to agency leaders, and indeed, agencies already conduct many of the activities we describe. We have found, however, that the majority of agencies treat these three stages as discrete tasks, rather than as related parts of an integrated and dynamic process for making the right choices at the right times. Rarely do agencies iterate through all three stages and ensure that they feed into each other. In our experience, agencies also fall prey to common pitfalls that hinder rapid, confident decision making, such as failing to take a broad enough view of the context, developing a static strategy that does not take into account trade-off decisions, creating a strategy document that lists broad principles rather than specific initiatives and pays only cursory attention to strategic risk, and adding



initiatives and programs to the strategy without stopping and eliminating those that have become nonessential.

Our proposed approach to strategic management focuses on iterative, interconnected decision making and incorporates familiar tools as well as several that may be new to some defense agencies. The approach shares some insights with other literature and thinking on military strategy. For example, in the 1970s, Colonel John Boyd of the US Air Force proposed the concept of the "OODA loop," the repeated process of observing, orienting, deciding, and acting. Boyd hypothesized that executing on this loop faster and better than the enemy is the key to winning in warfare. The first stage of our approach (understanding the context) corresponds to "observing" and aspects of "orienting," the second stage (making decisions and weighing risks) corresponds to other aspects of "orienting" and to "deciding," and the third stage (executing amid uncertainty) corresponds to "acting." Our emphasis, however, is on what it takes for a defense agency to observe and orient thoroughly, decide dynamically, and act quickly.

Understanding the context

With varying degrees of formality and frequency, agencies collect data about the external environment and the agency's internal operations to help them understand their context, resolve ambiguity where possible, and identify remaining uncertainties. Many agencies purchase external reports on global trends, administer internal surveys that gauge staff's attitudes or satisfaction, and engage in other informationgathering efforts. To supplement these efforts and gain a fuller perspective, agencies could build a repository of proprietary data—for example, data and trends on personnel, equipment, suppliers, and materials—and collaborate with

outside entities (such as private-sector industrial and technology companies) that provide in-depth support or intelligence.

Assessing the external environment

Most defense leaders studiously observe the external environment and identify the trends that could affect the defense and national-security landscape in the near term. However, in part because of annual budgetary cycles, leaders tend to give less thought to contextual trends that will develop over the longer term (say, ten years), such as demographic shifts, economic regionalization, and technological discontinuities. Here, we offer some questions to consider some rather obvious, others less so-that have been helpful to agencies as they ponder what the future might hold in three general areas: global trends, the competitive landscape (including trends in technology, equipment, and the personnel structure of other agencies and the private sector), and stakeholder perspectives.

Determine the impact of global trends

- What threats and adversaries, whether military or nonmilitary, are expected to emerge? What new weapons, tactics, and areas of operation will come into play? The US military's 2010 Quadrennial Defense Review, for instance, acknowledges climate change and its consequences—including rising sea levels and resource scarcity—as important factors in planning for future operations.
- What is the emerging geopolitical context?
 Who are the foreign and domestic influencers?
 Which scenarios and cultural mind-sets might drive future conflicts or produce pressure to avoid them? For example, how might conflict and unrest in Africa—in some cases related to the power struggle over vital raw materials such as oil or water—affect the rest of the world?

- How will the global and domestic economy shape the security context? What trends will develop with regard to domestic budget deficits, productivity, and prices for raw materials?
- What technological trends will shape the security context? To what degree will cybersecurity and other technologies be game changing? Protection from improvised explosive devices (IEDs) was a priority for US and coalition governments in the 2000s, but what technological innovations will be most needed in the next decade?
- What demographic trends will affect the agency?
 The obesity trend in some countries and aging populations in others, for instance, could significantly reduce the armed services' talent pool.

Analyze the competitive landscape (that is, the agency's position in the market for essential resources)

- How will the agency be positioned to compete for human capital? What is the expected impact of employment rates and economic growth on recruiting and retention? What will be the cultural drivers of propensity to serve?
- How will the agency be positioned to compete for technology and raw materials?

Understand stakeholders' perspectives and their likely evolution

- What are the emerging policy priorities of national leaders? Of major parties and key committees?
- How does the public regard the agency's brand and value proposition? How much public support is there for the country's defense and security policies?
- What are the current and emerging priorities of other domestic armed services and

- intragovernmental partners (such as intelligence and diplomatic agencies)? Of allied nations and their armed forces?
- What are the principal priorities of key nongovernmental groups, interest groups, and related businesses? What is their current and expected level of influence?
- What trends will affect the agency's major suppliers, and how will their perspectives likely evolve?

Assessing the internal environment

Getting an objective perspective of its internal environment can be difficult for any organization, in large part because organizations tend to have a culture of unexamined adherence to "how we have always done things." An additional challenge in the defense context is that many agencies have very rapid turnover in senior positions. An assessment of the following four areas can help an agency establish a baseline of its current performance and identify performance gaps:

- How well does the agency execute strategic initiatives? What have been the drivers of its successes and shortfalls? Here, an objective performance review—usually conducted by a third party—is crucial, because bias is likely to taint any self-assessment.
- What is the agency's financial situation? What
 are the assumptions behind the agency's
 forecasts of appropriations revenue, budgeting,
 and spending? What factors could cause
 those assumptions to change? How predisposed
 is the organization to actively seeking out
 efficiencies? Is the agency's financial planning
 process free from institutional biases and
 justification of sunk costs? For example, is there

- a process that would allow the agency to scrap a new IT system that does not meet operational requirements?
- What are the positive and negative aspects of the agency's culture (values and mind-sets)?
 How strong are the agency's capabilities (skills at all levels of the organization? What is inhibiting improvement? For example, given that most military cultures are hierarchical and rely on strong leaders, does the agency have mechanisms to foster bottom-up innovation?
- How healthy are the agency's leadership dynamics? What are the leaders' capabilities, and how will those change over time? To what degree are leaders aligned with one another? Senior leaders in defense agencies must have exceptional collaboration and communication skills, for example, yet few agencies focus on building such skills among senior personnel.

Cataloguing assumptions

Because the contextual analysis will almost always have to rely on imperfect and incomplete data, an agency must be aware of its most significant unknowns and how much risk lies behind them. For example, to understand how the price and availability of oil might affect its operations, an agency can list all the assumptions it is making about oil prices and availability, and then segment those assumptions based on how much supporting data exists (for example, none, partial, or almost complete). The agency could then conduct a sensitivity analysis on each assumption: what is the anticipated impact of being wrong slightly (5 percent to 10 percent if quantifiable), moderately (approximately 20 percent), or dramatically (30 percent or more)?

This exercise is critical to understanding not only the near-term impact of fluctuations in oil prices and supply but also the longer-term changes that the organization should begin preparing for today. Once an agency has cataloged its assumptions according to their relative uncertainty and potential impact, it can put in place appropriate mitigation or monitoring programs. Frequent updates to this "assumptions catalog" ensure that agency leaders are basing their decisions on the best information available. The assumptions catalog becomes an important input to scenario development during the decisionmaking process described in the next section.

Making strategic decisions and weighing risks

Even agencies that religiously gather data and generate insights about the internal and external context are not always disciplined about feeding these insights into their strategic-management processes. A failure to incorporate contextual insights into strategic decisions can move an organization in the wrong direction. Among the key aspects of dynamic management, therefore, are setting a vision with measurable goals and then translating those goals into initiatives that take into account the uncertainties identified in the contextual assessment.

Setting and adhering to a vision and measurable goals

Most defense agencies have common elements to their mission. The US Army's mission, for example, is "to protect our nation from our enemies, defend our vital national interests, and provide support to civil authorities in response to domestic emergencies." Singapore's armed forces have a similar mission: "to enhance Singapore's peace and security through deterrence and diplomacy, and should these fail, to secure a swift and decisive victory over the aggressor." But these two countries face different environments and challenges.

Exhibit 1

Setting their sights

The United Kingdom's Ministry of Defence and Air Force have a defined vision and goals.

UK Ministry of Defence vision

- Defend the United Kingdom and its interests
- Strengthen international peace and stability
- Be a force for good in the world

We achieve this aim by working together on our core task to produce battle-winning people and equipment that are:

- Fit for the challenge of today
- · Ready for the tasks of tomorrow
- Capable of building for the future

Royal Air Force vision

An **agile**, **adaptable**, and **capable**Air Force that, person for person,
is second to none and makes
a decisive air power contribution
in support of the UK Defence Mission

Agile

Our ability to create rapid effect across the full spectrum of operations in a range of environments and circumstances

Adaptable

Our ability to react in an appropriate time scale to new challenges and to seize new opportunities

Capable

Having the right equipment and doctrine, together with sufficient, motivated, and capable people to deliver precise campaign effects successfully, at range, in time

This demands the Royal Air Force should:

- Generate air power (comprising equipment and trained personnel, at readiness) to achieve precise campaign effects across the spectrum of conflict whenever and wherever they are required
- Develop air power to face the challenges of the future, providing a decisive contribution to the security of the United Kingdom and supporting its role as a force for good
- Be modern and flexible, and proud of its heritage
- Foster professionalism and team spirit founded on good leadership, commitment, and self-discipline
- Offer opportunity to all, a rewarding and enjoyable career, and skills for life

Source: UK Ministry of Defence, Defence Plan 2009-2013; UK Royal Air Force Strategy 2006 (still current in 2010)

To guide day-to-day decision making in support of the mission, a defense agency needs a clear vision of what success looks like within a specific strategic time frame, as well as a set of metrics that will tell the agency whether it has achieved that vision. The vision must be easily understood, inspirational, and—most important—actionable. Disaggregating a vision into a handful of strategic goals, each with its own simple set of metrics, allows everyone in the organization to see the opportunity for individual and collective contribution.

For example, the vision and goals of the Royal Air Force (RAF) build off the United Kingdom Ministry of Defence's vision (Exhibit 1). Taking the example further, the RAF might link its first goal—which has to do with readiness of personnel and equipment—to metrics such as the availability of people by skill type and unit, the adequacy of training, and equipment levels.

Developing and prioritizing initiatives

To translate an agency's vision and goals into a set

of linked strategic initiatives, defense leaders can use a range of familiar analytical tools, such as scenario planning. Once they have identified key areas of uncertainty as part of the contextual assessment, leaders can engage in a disciplined exploration of potential scenarios, including rare but catastrophic outcomes. Some of the key uncertainties-for example, the impact of the recent global economic crisis—may be nonmilitary variables. An agency can also use other analytical tools (such as decision trees, war gaming, or probabilistic modeling) to develop scenarios. The next steps involve weighing the likelihood of the various scenarios, identifying any gaps they expose in the agency's strategic goals, and developing initiatives to fill those gaps while allowing for a comfortable level of risk.

The idea of accepting a certain amount of risk can conflict with a prevalent bias in military psychology. Militaries feel the need to always be prepared; the natural inclination within any defense organization is to try to fill every gap completely and eliminate, or at least reduce, all risks—a laudable but unachievable aim. Part of managing risk dynamically is making informed decisions about which gaps to address and to what extent, and which gaps to tolerate, if only temporarily.

As it determines what to do, what not to do, and the appropriate degrees of risk to absorb, an agency may find two tools very helpful: a strategic playbook and a portfolio of initiatives (POI). A strategic playbook shows both an initiative's absolute value and its value under different scenarios (Exhibit 2). The agency can thus identify its no-regrets moves (those for which it can quickly allocate resources and assign responsibility), its best bets (strategic choices based on advantaged information) and real options (the next-best choice when the best bet involves too much risk or more resources than are available), and its contingency plans (those that would become favorable if a "trigger" event happens). Each type of initiative requires a different level of resources and monitoring.

The agency can then explore the resulting questions of risk and trade-offs using a portfolio of initiatives (Exhibit 3). The most thoughtful defense leaders prioritize initiatives and make trade-off decisions based in part on a realistic accounting of the resources required across the entire portfolio. So as not to impose new burdens on an already stretched organization, they make well-considered choices about what the agency will not do or will stop doing, and then communicate these choices unambiguously to the organization. Almost always, these decisions are difficult and require exceptional levels of clarity and fact-based conversation among senior and mid-level leaders.

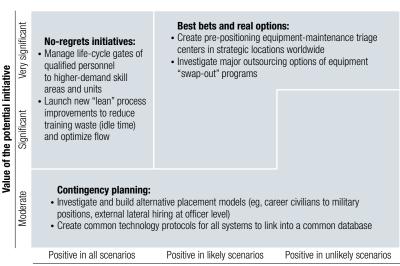
Executing amid uncertainty

Institutional flexibility is critical to an agency's ability to respond to material changes in the environment and adjust levels of investment. Building this flexibility into an organization will, in many cases, require the introduction of new processes. Some of the most important include the following:

Exhibit 2

By the book

Using lenses of uncertainty and value, a set of initiatives can be translated into a strategic playbook.



Value of initiative in different scenarios

Exhibit 3

In the mix

A "portfolio" approach balances risk against short- and longterm opportunities and makes resource trade-offs explicit. Portfolio of initiatives (readiness examples)

Smaller impact

ILLUSTRATIO

Highest impact

Familiarity

Familiar

- Knowledge exists internally or is easily acquired
- Involves execution risk

Unfamiliar

- · Knowledge is limited
- Results may be unpredictable

Uncertain

- Possibility of success is difficult to estimate
- Can be overcome with passage of time



Moderate impact

Time to impact

A Improve provision of people to operational forces, avoid inventory imbalances

- A1 Manage life-cycle gates of qualified personnel to higher-demand skill areas and units
- A2 Investigate and build alternative placement models (eg, career civilians to military positions)

B Increase trained population

- B1 Institute new training doctrine to tier critical skill training to better reflect 2010 needs
- B2 Launch process improvements to reduce idle time

C Increase equipment preparedness

- C1 Create pre-positioning equipment maintenance triage centers in strategic locations worldwide
- C2 Increase use of "just-in-time" parts supply process to improve equipment uptime

D Leverage technology advancement

- D1 Improve precision of personnel-management system with new architecture design
- D2 Create common technology protocols for all systems to link into a common database

Source: McKinsey proprietary framework and analysis

Exhibit 4

Attitude adjustment

To confront uncertainty, organizations will have to change gears.

From a mind-set of \dots

- Expecting stability and downplaying variability and making "reasonable" assumptions
- · Delegating decisions downward to reduce complexity
- Meeting deadlines at almost any cost
- · Maximizing investments by fully committing resources
- · Making decisions at the scheduled time
- Believing that good leaders inspire confidence by making visionary statements and sticking to a single course of action

To a mind-set of ...

- Knowing that uncertainty and change are the norm and that the real risks are in the assumptions
- Collaborating on critical decisions and making sure the right people are involved to make the best possible choices
- Individually and collectively making decisions in the best interest of the organization
- Deliberately accumulating resource reserves and committing them only when risk-adjusted returns are clearly attractive
- Making decisions when the timing is right, with the right amount of staff work
- Understanding that good leaders are navigators who confidently adjust course as conditions change

An iterative—rather than annual—management cycle. Recurring forums for bringing leadership together—whether for 30 minutes per week, three hours a month, one day per quarter, or some other regular interval—are more conducive to dynamic management than an annual planning cycle. Such forums should include formal mechanisms for evaluating the POI regularly; repeating the full environmental scan and

gathering updates on the most crucial indicators; monitoring thoughtfully selected information triggers (on an hourly or daily basis for imminent threats, quarterly for slower-moving trends); and coming up with contingency plans for potential game-changing events.

An integrative resource-allocation process. A comprehensive look at the POI should factor into

the agency's process for allocating resources (including capital, manpower, and leadership oversight), with careful regard for legislative constraints imposed by appropriations and authorizing processes. End products could include a rolling 18-month budget or multiple financial plans that reflect different scenarios and are updated quarterly. The goal is to allocate resources "just in time" through a stage-gating process in which leadership checks in at specific milestones to decide whether to continue, abandon, or redirect an initiative, thus allowing the agency to change its investment level in each initiative as the environment evolves.

Performance-management systems that drive accountability and foster understanding. Clear metrics and regular performance reviews consistent with agency and military command structure are fundamental enablers of dynamic management.

These reviews might include strategic "performance dialogues" throughout the organization. A performance dialogue convenes senior leaders, key commanders, and owners of initiatives to discuss progress against metrics, diagnose the root causes of problems, and develop potential solutions. Such dialogues are helpful for communicating why agency leaders have chosen a certain direction or taken certain actions and for giving individuals a sense of their role in realizing the agency's vision.

A process for collaboration across initiatives. The agency's governance model should enable mid- and project-level leadership to resolve conflicts and share ideas but ensure that a single person is ultimately accountable for the success of an initiative. Because most initiatives will have

implications for other initiatives, the leaders of each initiative should have appropriate exposure to one another. Initiatives that focus on personnel readiness, for instance, might each have different leaders and timetables for completion and impact, making collaboration and coordination critical to success.

Processes such as these can help an agency support and monitor its strategy while simultaneously creating mechanisms for adaptability. For many agencies, the introduction of new processes, or even the refinement of old ones, will require a change in mind-sets (Exhibit 4).

• •

Most defense agencies have implemented at least some of the elements outlined in this article. However, to fully embrace a dynamic approach to strategic management, an agency will need to start by building a baseline of the internal and external context, and the organization's vision and goals. From there, it can begin the kind of iterative strategic decision-making cycle we have described. Initially, the agency could focus on one component of the strategy (such as personnel) and its impact on the other components, or it could focus on a single issue that cuts across all components (such as deployment readiness). A singular focus will allow the agency to become more comfortable with the approach and develop the requisite strategic skills, after which it can expand the scope of the effort. Agencies that engage in dynamic management will be able to adjust course confidently as the context changes and ensure that everyone in the organization quickly and effectively executes any shift in course that leaders deem necessary. •