Creative Thinking: Linking Environment, Vision, Change, and Strategy

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Journal Article | Mar 29 2012 - 3:59am

Editor's Note: A list of references is included at the end of the article for further reading.

Abstract

Called a “blueprint for the Joint Force,” the 2012 Strategic Defense Guidance will guide decision-making and shape current and future programs and budgets. A blueprint or vision is intended to do three things: First, it creates clarity and simplifies. Second, it is motivational. Third, it coordinates actions in effective and efficient ways. Unfortunately, this guidance fails to keep the “main thing the main thing,” is complicated, uninspiring, and creates confusion. Today’s interconnected environment consists of complex adaptive systems, and to be successful senior military leaders must understand the relationship between the environment, vision, change, and strategy. Today’s unique challenges require creative approaches to problem-solving. Creative thinking uses divergent and convergent thinking to see things in alternative ways to facilitate problem solving. Using the creative thinking tools of fluency, flexibility, originality, and elaboration can facilitate increased understanding of global complexities. Creative thinking is necessary to help senior military leaders and staff officers to understand the linkages between the current environment, the vision for global US leadership, the change necessary to support that vision, and the strategy needed to align the ends, ways, and means for success.

The recent 2012 Strategic Defense Guidance emphasizes that “…the U.S. is not retreating from its role as a global leader.” To show the breadth and depth of this commitment, the new strategic guidance states that there are 10 primary DOD missions with seven guiding principles. Steven Covey wrote that “the main thing is to keep the main thing the main thing.” Ten primary missions with seven guiding principles is a lot of “main things” and leaves one wondering where to begin. Called a “blueprint for the Joint Force,” the 2012 Strategic Defense Guidance will guide decision making and shape current and future programs and budgets. A blueprint is also called a “vision” and noted author John Kotter states that a vision serves three important purposes. First, it creates clarity and simplifies. Second, it’s motivational. Third, it coordinates actions in effective and efficient ways.

Unfortunately, this guidance fails to keep the “main thing the main thing,” is complicated, uninspiring, and creates confusion. With that said, the current task becomes to try to understand the strategic environment, the vision, the strategic priorities, and the implications for the joint force. Given this
“wicked” task, the ability to provide insightful recommendations and courses of action for decision makers will depend upon the creativity of strategic thinking officers. Strategic thinking begins with an understanding of the environment from which a vision is crafted and forms the foundation for subsequent action. Inherent within a vision is an understanding of the dynamic nature of the environment and how change influences and reshapes strategy development. Creative thinking facilitates environmental understanding and enables decision makers to plan for and adapt to inevitable changes while pursuing national interests.

Environment

Defined as those elements that have the potential to affect all or part of the organization, the environment can influence international and domestic organizations alike. Economic, socio-cultural, and political changes in one corner of the world can immediately affect other areas. The distinctions between international and domestic operations have become blurred and increasingly irrelevant. This blurring of operations leads to increased complexity and constant change, which are the only two constants in today’s environment. As a result, leaders must be aware of the changes as they occur and exploit opportunities as they emerge.

Discontinuities, such as technological innovations, are changes that never occurred before and referred to as “one-time events.” Typically, an organization can do very little, if anything, to prepare for such changes other than to react promptly. To manage these unexpected changes means leaders must be aware of weak environmental signals and understand that changes rarely occur without supporting context. A staff’s challenge is to characterize the appropriate context, discern its trends and associated potential, and assess and suggest changes to avoid or minimize adverse effects.

Understanding begins with domain knowledge of the complexities inherent within the environmental systems. One approach to systems understanding is through complexity theory. Complexity theory uses systematic inquiry to develop soft, multifaceted, and multidisciplinary frameworks of reality. Through pattern recognition within the complex environment, potential system interactions can be better understood and described. Examples of complex systems are social systems, ecologies, economies, cultures, politics, technologies, and weather. In fact, this type of systems understanding focuses on the adaptive nature of systems that possess emergent variables as well as those linear or hierarchical.

Organizations that successfully practice a form of systematic understanding reduce the effects of surprise in crises and accelerate the ability to react to emergent opportunities or threats. An environment that is adaptable requires an organization equally adaptable and agile between and across organizational levels to interact successfully with it. Agility depends upon specific guidance that is understood and interpreted correctly. This type of a construct is fundamentally trust-based and lateral, and interaction is neither rule-based nor is it hierarchical or institutional. It involves the leader trusting in his people to “do the right thing” as opposed to “doing things right,” and it requires subordinates’ trust in leadership.

Vision

Understanding the current environment lays the foundation for developing an appropriate vision that will posture an organization for future success. A vision creates focus for an organization and its leadership. Initially, vision “grabs” the leader and through an interactive process with subordinates and staffs, “grabs” them, too. “Vision animates, inspires, and transforms purpose into action” and provides the organization with the unified focus necessary to step into the future. Convergent and divergent forces mark the future and must be balanced, not in a linear way, but an additive way. Visions must incorporate both of these forces to: a) generate shared purpose, b) nurture inquiry and learning, c) increase external and internal relationships, d) foster diversity and specialization as well as amalgamation, e) build shared values and
principles of action, and f) define vital organizational behavior boundaries.

The power of a vision is its ability to infuse enthusiasm, unite people, and to provide institutional and individual focus. An organization’s vision and principles must reside in the hearts and minds of its members. In a decentralized and often dislocated organizational construct, it is essential to have an internalized understanding of the organization’s identity and its future.

Change

Unforeseen circumstances or changes are a defining characteristic of a complex adaptive system and leadership must encourage an organizational identity that reflects that same complexity and adaptability. The key to managing change may not necessarily be to see it right away or even first, but to see the change with enough time to react, and to react better than adversaries or competitors. Leaders and staffs, however, typically operate on imperfect data, explore a limited number of options, and do not necessarily create accurate causal maps of reality. To remain current and relevant, leaders must attempt to “read” the environment to posture assets, resources, and personnel for future action.

The environment and an organization’s vision are tied closely together through forecasting. Forecasting and planning make the world seem more deterministic and give organizations the confidence to cope with and induce action when “conditions” are favorable. Keeping in mind that judgment plays a crucial role in forecasting, as predicting the likelihood of future events is near impossible, organizations can estimate across a range of possible futures. Long-range forecasting is typically seen as two years or longer and is notoriously inaccurate, particularly in the fields of population, economics, energy, transportation, and technology. Derived from long-term plans, medium-range forecasting (three months to two years) is an estimate of available resources, constraints, and competitive considerations. Operational budgets are an example or a common form of medium-range forecasting. Short-range forecasting is marked by considerable inertia in most economic and natural phenomena. The present states of many environmental variables are predictive of the short term future (three months or less).

Change may occur rapidly, accumulate nonlinearly, encounter periods of stability, be encouraged, take many resources, and have a profound effect on system outcomes. Then again, it may not, which makes forecasting change extremely difficult. Whatever the change is and however it manifests itself, the organization’s reaction to it is informed by the desired state and the shared vision.

Strategy

Strategies are developed or changed because something fundamental in the environment has changed. Strategy requires synthesis and creativity and becomes a problem-solving process with the purpose of managing the organization through the turbulent change process. Strategy is about dealing with problems as they arise and about making changes so that the organization works better, more effectively, and can react to future changes.

A proactive strategy is the desire to be an active part of the changing environment, which needs an insightful planning process. A clear vision and specific goals initiates the strategy development process. Strategy development involves the development of unambiguous, attainable objectives that account for available means and resources (also known as the ends, ways, and means linkage).

Organizations have a history of making changes and tend to develop strategies in much the same manner time and again, oftentimes ignoring changes in the ends, ways, or means, or a combination thereof. As a result, sometimes it is necessary for organizations not to operate as usual and changing this routine requires creativity.
Creative Thinking.

“Creativity is the ability to challenge assumptions, recognize patterns, see in new ways, make connections, take risks, and seize upon chance.” Assumptions shape strategy formulation and the generation of potential solutions. Assumptions are the underlying bedrock used to develop and sustain the organizational view of reality. Challenging assumptions means to question these deep-rooted perceptions of substantive issues and how they pertain to organizational problems. Through the search for patterns within a complex environment, systems can be understood and their possible evolutions described. Recognizing patterns means to understand system interaction and relationships, and the simple patterns that emerge that can lead to problem solution. Because only one type of approach is typically made in complex problem-solving, efforts at developing acceptable solutions often fail. Seeing in new ways means incorporating multiple perspectives to represent problems in as many ways possible, which results in higher rates of success. Making connections means that new ideas or solutions are the result of the synergy between previously disconnected thoughts or patterns. Taking risk means that there is always a potential for failures because of many factors outside of one’s control, but calculated risk means to take advantage of opportunities to move forward.

Clear goals and structures facilitate creative thinking when defining the problem. By relying upon ideation and judgment, problems are better understood in the context of current and desired conditions. As leaders and staffs move from the familiar to the novel, poorly defined tasks and unclear goals inhibit needed learning and skill development. Two thinking skills necessary for creative thinking are divergent and convergent thinking. Divergent thinking is most needed for creating new ways to represent problems, gain perspective, and develop new solutions; convergent thinking has a larger role in developing common frames of reference and determining the optimal solution that best addresses the specific issue at hand.

Expertise, creative-thinking skills, and motivation are components of creativity. Expertise is domain specific as exemplified through technical, procedural, and intellectual knowledge and skill. Expressed through flexibility and imagination, creative thinking skills help develop innovative solutions and demand the courage to change the status quo, sometimes in the face of heavy institutional opposition or lethargy. Creative thinking also requires motivation or a passion to problem-solve and is typically an internally driven desire. A shared vision, clearly articulated goals or objectives, and the support of senior leadership facilitate creative problem solving.

Creative Problem Solving and Creative Thinking Tools.

In solving complex problems, there is doubt about the applicable or necessary concepts, rules, and principles. Complex problems are organized such that they can possess various solutions, many potential solution paths, or no acceptable solutions at all. Creative thinking assists in providing the unique or new approaches required to solve complex problems.

The human mind does not work in a linear or list-like fashion. The most common forms of communication are speech or writing, but these are limited by time and space to one word at a time. Research shows that the brain is far more multidimensional and capable of processing enormous amounts of information using images, color, relationships, associations, and other depictions in addition to speech or the written word. Defined as “seeking original ways to reach goals when the means to do so are not readily apparent,” creative thinking uses divergent and convergent thinking. Divergent thinking begins at a common point and generates a variety of thoughts, whereas convergent thinking begins from various data points or potential solutions and searches for the one that best addresses the competing requirements.

Problem representation can substantially influence a problem solver’s approach to a potential solution. Reorganizing spatial information facilitates the development of cognitive activities necessary to problem-
solve. Spatial or cognitive maps of complex problems typically result in better solutions and in shorter times than written or oral representations. Spatial or cognitive maps facilitate reasoning and assists in the disambiguation of complex problem elements. As problem complexity increases, it becomes extremely important to produce efficient representations. The more ways a problem is represented in relation to domain knowledge, the better able disparate divisions within an organization will be able to associate required action with organizational direction.

Tools of creativity are “fluency, flexibility, originality, and elaboration.” Research has shown that the development of a desirable or useful solution is typically the result of many ideas. Creative fluency seeks to understand or explain the problem in as many ways as possible through the development of multiple ideas, alternatives, or solutions. One type of creative fluency technique is brainstorming, which is used to produce lists of ideas in developing solutions to problems. This technique generates innovative or novel approaches by restraining the typical tendency to evaluate, criticize, or reject ideas prematurely. The goal in brainstorming is to break up the idea generation process from the idea evaluation process.

Flexibility is the skill to generate ideas or to see things in differing ways given the same variables. It requires one to abandon previous paradigms and to expand thinking in multiple directions. It is especially important when traditional methods of inquiry or solutions fail to give satisfactory results. Flexibility facilitates novel or alternative approaches to thinking by addressing contradictions, incompatibilities, alternative perspectives, or breaking through psychological, emotional, or cultural barriers. Studies have shown that verbal checklists enhance flexibility in creativity processes. These checklists use a series of questions about current processes or capabilities to yield new perspectives and innovation. The main idea is to improve a current product or capability through a sequence of questions and to pursue the answers to a hypothetical end. The use of provocative questions is another way to increase flexibility and to broaden situational perspective for consideration. “What would happen if….” is a typical type of question. Another flexibility technique is scenario-building. Scenario-building makes the assumption that if the future is unpredictable, then a variety of futures may enhance understanding. Scenario-building emphasizes those variables that may compel an outcome vice predicting specific outcomes. What corresponds to scenario building is contingency planning—the creation of alternate plans to deal with different scenarios.

Originality means departing from the routine and ordinary. Statistically infrequent, originality requires individuals to take mental leaps from the obvious to something new or untried. The use of this tool immediately puts the individual in a “minority of one” and requires courage to fight the typical institutional resistance to change. Another popular technique to enhance originality is picture stimulation, which provides ideas in addition to those obtained during brainstorming. Photo excursion uses a similar method that requires participants to alter their thinking environment by leaving the workplace to take photos of potential solutions or ideas. Object stimulation is a related technique in which objects are used in lieu of photos. Analogies or metaphors can also enhance originality. An analogy is a comparison of two dissimilar things shown to have similarities. A metaphor is used to understand one element in terms of another element.

To elaborate means to work something out in greater detail. Elaboration relies upon the interaction between the left (analytical) and right (creative) sides of the brain. Mind mapping is a type of elaboration and is a creative technique that uses visual and verbal aspects to expand on structurally complex situations during complex problem solving. By definition, a mind map creates patterns of related ideas, processes, and objects. A mind map usually inserts the subject of the inquiry in the middle of the page, uses key words to represent ideas, connects key words to the central object through branches and sub-branches, relies upon colors and symbols to emphasize ideas, and identifies new relationships. As a mind map is open-ended, the brain enables new connections more easily.
Other types of elaboration are concept maps or cognitive maps, which are also known as semantic maps. Concept or cognitive maps are spatial depictions of complex concepts and their associated relationships and used to represent understanding. To be creative, new ideas are connected to prior knowledge. Concept or cognitive maps help to organize individual, or more important, group knowledge by incorporating newly learned information into an increasingly complex abstract. Concept or cognitive maps aid visualizing external information, which helps to organize problem-solving strategies.

**Linking Environment, Vision, Change, and Strategy.**

Continued US global leadership is dependent upon senior leaders’ and staffs’ ability to think creatively in a dynamic, resource-constrained global environment. Senior leaders must be comfortable working in ambiguity, understand nonlinearity, and be able to create shared visions for organizations and staffs to operate in a complex, interconnected world. Strategy formation is a matter of synthesis—it demands that patterns are recognized between unlikely elements and long-term possibilities seen in short-term opportunities. The goal is not the perfect strategy, but a design that satisfies the problem while providing for future adaptability and flexibility.

Creative approaches to strategy demand an emphasis on systems thinking and understanding organizational complexity. Creative tools such as fluency, flexibility, elaboration, and originality facilitate understanding of the complexity of interrelated global systems that exist today. These creative tools enable leaders to create institutional understanding through a shared vision, strategy, and an organizational approach.

Change is constant and requires organizational agility and resiliency in the adaptation of new roles and skills. When faced with change, successful organizations generate creative responses. By integrating creative thinking into the strategy development process and using the available creativity tools (and those yet created), perhaps some of the challenges of 10 primary missions can be addressed.

**References**


Vol. 27, No. 2, 115-138.


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