Ideas and Initiative: The Junior Leaders Role in Innovation

Why Innovate?

The nation faces many security challenges: trans-national terrorist groups, rogue nation states and technologically sophisticated rising powers. Since the beginning of World War II with the advent of radar, the US Navy has increasingly turned to technology to meet these challenges. Increased weapon lethality and precision allowed us to shrink the force while still maintaining a military superiority in every physical domain (i.e., land, sea, air, undersea and space). But extracting additional increments of technological competitive advantage comes at an exponentially growing cost. Mature technologies proliferate to other nations, and new, leap-ahead insights are rare and costly. The current technology base acts as a straightjacket, forcing new systems to integrate with them, further constraining new technology paths.

Navy leadership recognizes simply heaping new technological solutions on to the pile of the old no longer provides an affordable path to overcoming current and future challenges. Similar to the increasing effort required to squeeze the remaining oil from a mature well, improving a mature technology often requires costly resources to extract the needed capability from a dwindling supply of technological good ideas.

There are two paths out of this dilemma: find new methods and capabilities that increase the effectiveness of the current way we fight[1], and change "how" we fight[2] – both of these paths require innovation. Innovation is not just "doing more with less", although that will likely be the result. It is not just "working smarter, not harder", although the solutions developed will improve our effectiveness. Innovation is the discovery of new ways and means that lead to a significant increase in operational effectiveness[3].

Although innovation is useful at every level of war, ideas that change how we execute at the operational level of war grabs the lion's share of the Navy's focus as it has the potential for the greatest impact. Yet the tactical level (unit level) can be very important too. Tactical level innovation does produce significant productivity gains and is where we can foster a culture of innovation. Senior leaders developed their broader professional perspectives while working as tacticians during their "storming" junior years, a time when mistakes and missteps are expected and tolerated. If the Navy wants to promote an innovative spirit into its culture, the tactical level is the place to focus. New forms of social communication expand opportunities to exchange ideas when big Navy is looking for a fresh voice. Now,

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[1] Clayton M. Christenson, author of "The Innovator's Dilemma", describes sustaining technology as that which "improves the performance of current products." In the warfighting domain, "current products" maps to "current ways we fight". New capabilities and new tactics that improve the current warfighting paradigm fall into the category of sustaining innovations.

[2] Christenson describes disruptive technology as new products that often perform poorly, at least initially, but have a long-term potential of far surpassing products developed from sustaining technology. Reluctance to transition to a poorer performing product is the nature of the "dilemma" he discusses in his book. For our discussion, "new products" map to "new ways of fighting" or a new warfighting paradigm.

[3] Christenson defines innovation as a "change in the processes by which an organization transforms labor, capital, materials and information into products and services of greater value". I like this definition because it applies to a broad range of activities and covers both sustaining and disruptive innovation.

more than ever before, junior leaders are well positioned to affect the broader organizational agenda. There is much subordinates can and should do to promote innovation in their organization. This paper highlights ways junior officers can and should contribute to Navy innovation.

This is not a call to shirk assigned duties in favor of railing against the machine, tilting at the Navy's paradigmatic windmills. Accomplishing assigned tasks is still a primary responsibility. But a time comes when practical experience and acquired skills run their course and need to be reevaluated and energized with new thinking.

What can junior leaders do to support innovation?

Innovation begins with an idea. Obviously, the first step in the innovation process is to come up with a good idea. Known as ideation, this creative process is the one most associated with a blinding flash of insight. Most innovation researchers consider the blinding insight phenomenon to be a myth. Although insights may feel like they come as a flash of brilliance, that insight is typically the last step of a slow process of rumination that may have begun years back with a hunch or perhaps an inkling that something was not quite right and could be improved. Another myth researchers are trying to dispel is that the ability to ideate, to harness creativity towards a problem or concern, is innate and rare. In fact, there is much that can be done to develop an innovative mind.

- Read broadly. Many innovative ideas are really just new combinations of old ideas – a new idea mash up if you will. Johannes Gutenberg combined an olive press with moveable type to create the printing press, an invention that altered the course of a civilization. Wood cards with holes used to control weaving looms were reincarnated as the punch card early computers used to input programs and data. Understanding how work is performed in different fields of endeavor, even those seemingly unrelated, provides needed mental grist for the ideation mill.

  Junior officers face increasing pressure to obtain deep knowledge over a narrow slice of the Navy pie. Although this is a natural result of the complex weapon systems we employ, it inhibits broad understanding, impeding outside the box thinking. A small slice of knowledge, no matter the depth of expertise, makes for a very small box.

- Gain awareness of the issues. Engage in venues that involve individuals with diverse backgrounds and experience. Gaining a broad awareness of issues facing the unit helps the junior officer develop underpinning themes that one day may form the conceptual foundation of an innovative idea.

- Look one or two levels up. What are your boss' issues? What are his boss' issues? Pursuing this line of reasoning will expand your professional horizon beyond day-to-day activities. Tactical units conduct a mission, which in turn supports an operation, which again supports operational and strategic objectives. An understanding of higher objectives and needs provides the senior leader perspective. Combined with the junior level, hands-on experience, this understanding forms a complete perspective. The junior officer able to view the Navy from the nexus of the

tactical and the operational is uniquely positioned to propose tactical solutions that address larger operational problems. This understanding is of great importance when the time comes to confront the inevitable senior level resistance truly transformational ideas draw.

Once the seed of an idea forms, it needs time to germinate. Conduct thought experiments, mull over different variants of the idea to better refine it. This is when hunches and inklings solidify into ideas for change. Take the time to bounce ideas off other people. Seeking different points of view, especially contrary ones, aids an open mind. Attempt to understand opposing positions as well as the reasoning behind those positions.

If the idea crumbles under the stress test of peer review, take solace in the knowledge that all who have accomplished great things surely treaded the same path. Do not be discouraged. Conventional wisdom says that from thousands of good ideas only a few useful innovations will form. False starts are to be expected and should not derail a sincere effort to make a difference.

Conceptualize the idea. Many people who propose an idea that gets rejected become disillusioned and discouraged. They point the finger at a rigid hierarchical bureaucracy filled with entrenched special interests and risk-averse apparatchiks. All that may be true yet change happens in this Navy every day. What often goes underappreciated is how hard change is for any organization, especially one as large as the Navy. If a junior leader's idea does not gain a receptive audience, poor delivery, vice the audience's lack of vision, is the more likely causal factor.

Ideas must be clearly articulated, painting a picture of how it will benefit the Navy, and address potential critics of the idea. This is hard work. Analyzing opposing viewpoints and developing mitigating arguments requires effort well beyond the initial ideation process. Many ideas fail to be adopted because they lack the conceptual development needed to turn the idea into a compelling case for change. If the idea's originator is unwilling to do it, it is unlikely any of his superiors will clear their agenda to take on the additional work. One should expect that any good idea will ruffle a few feathers.

It is easy blame resistance to "old think" and risk aversion. Yet innovators must be empathetic to their boss' problems and discover what is really driving the resistance. Know the idea's enemy, then adapt and overcome. Make the arguments in the context of the criticism. If possible, provide data that refutes the opposing opinion, or better yet, addresses the point of resistance by illustrating how the idea can improve the condition related to the resistance.

Take action. Once an idea is conceptualized, it must be communicated to an audience able to affect the change. A junior leader convinced of the value of his idea must be prepared to aggressively champion it, doing more than simply proposing the idea to his immediate superior. ADM Hyman Rickover, the father of the nuclear navy, once had a notion that submarines powered with nuclear reactors would be a game-changing innovation. If he had put the idea in his CO's suggestion box and patiently waited, instead of doggedly advocating for the idea against formidable resistance, we might still be filling submarines with diesel fuel. Granted, this is an extreme example of a major organizational change that required enormous personal fortitude to overcome resistance; but every idea needs some form of advocacy.

Many formal mechanisms exist to communicate recommended changes. Solicit your chain of command to help propel your idea forward. Every command chain eventually leads to a decision maker with the authority and resources to institute the recommendation.

More impactful ideas may need a period of socialization in order to acclimatize it to a potentially resistant audience. This can be done as early as the conceptualization phase. Informal blogs or other professional venues can offer valuable peer review. The Sailor Bob blogsite (http://www.sailorbob.com) exemplifies this type of informal venue. An idea proposed in a blog that does not draw at least some discussion or ire is probably not worth pursuing.

Impactful and well conceptualized ideas often find voice in professional journals such as Proceedings magazine. Another venue to submit an idea for development and conceptualization is the Navy Warfare Development Command's concept harvesting program. This program accepts submissions that support an operational level warfighting focus.

What is not innovation?

A note of caution to those accepting the challenge to innovate: beware of the sub-optimal idea dressed in innovative clothing. True innovation is not a zero-sum game; it increases overall Navy productivity. Sub-optimal solutions are those that benefit one part of the organization at the expense of another.

One strategy falsely associated with innovation is improvements focused on metrics instead of mission. Units not engaged in warfighting must rely on surrogate metrics to assess their performance and ability to wage war. The Defense Readiness and Reporting System – Navy (DRRS-N) acts as that surrogate by using metrics to measure training and the material readiness considered necessary to be combat effective. Favorable assessment on the metrics often becomes the mission rather than a measure of mission effectiveness. Optimizing the metric does not always translate to increased mission performance. A true innovation improves a unit's ability to conduct its mission. Higher readiness numbers should be a byproduct of innovation, not the focus of it.

Conclusion

Boss wanted

Must be able to clearly articulate subordinate responsibilities and then provide them with the resources and authorities they need to be effective. Possess an energizing charisma able to instill initiative and motivate subordinates to enthusiastically seek and seize opportunity.

Although there are surely leaders among us who fit this description, most leaders are over tasked and under resourced, barely able to meet their own boss' expectations, much less devote additional time to properly develop and motivate their junior leaders to do more than their assigned duties. Yet the Navy needs junior leaders to do just that. Focusing the untapped energy and vitality of the junior members

the Navy's hard problems will certainly lead to useful innovation. Mechanisms exist to propose good ideas, forge them in debate, and communicate them to decision makers able to affect change.

Organizational culture is a broad term that describes how an organization gets things done. Cultures adapt to external demands and internal pressures. By actively exploring their surroundings, questioning old practices, and connecting different perspectives, junior leaders can spark a self-sustaining combustion of innovation that will give our Navy the warfighting advantage it needs for future conflicts.

References

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