# Embracing People, Products, and Failure

## Establishing an innovation culture across the Navy and Marine Corps acquisition community using industry benchmarks

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Sgt Suwanarat sights in with the Mk13 Mod 7 Sniper Rifle aboard MCB Quantico, VA. (Photo by SSgt Bryan Nygaard.)

Over the past twenty years, near-peer military Service adversaries of the United States Navy and Marine Corps have rapidly closed the combat capability gap via rapid innovation. The speed of complex technical military development remains subject to concepts like Moore's Law,[1] where cutting edge technologies continue to improve at rates fast enough to render predecessor technologies obsolete in less than two years. The Department of the Navy's (DON) complicated policies, practices, and processes encourage protracted acquisition timelines, often resulting in greater than four years to develop and deliver warfighting products. This ultimately has enabled our adversaries to outpace our organic warfighting foundry capacity. As a result, senior civilian and military executives have challenged the Naval acquisition community to begin a "revolution in military acquisition affairs," with a strong emphasis on increasing agility, pivot speed, and delivery of critical capabilities and products to warfighters. New authorities, tools, and structures, such as 2016 National Defense Authorization Act Sections 804/806, Defense Innovation Unit, NavalX technology bridge, NAVAIR's new mission aligned organization, revised DON acquisition instructions, etc., have all combined to provide new and promising pathways to stimulate innovation.

Yet, even with these positive changes, the speed and pace of innovation found across the Navy and Marine Corps acquisition community remains relatively slow. Fundamentally, the DON exhibits a culture valuing process ahead of innovation and final products. The growing bureaucratic ethos of traditional thinking and strict adherence to legacy policy stifles innovation, business relationships with industry, and the overall development of future combat power. In order to most effectively arm warfighters with the capabilities to meet the vision and requirements of the *National Defense Strategy* (Washington, DC: 2018) and *Force Design 2030*, (Washington, DC: HQMC, July 2019), the Navy and Marine Corps acquisition community must fundamentally transform their culture from one of simply "talking about innovation" to "being truly innovative." In principle, the DON must make innovation a core value, with leaders at all levels holding others within the community accountable for fostering innovative behaviors, developing inno-

vative ideas, and producing innovative products.

Though a daunting task, the Navy and Marine Corps have a tremendous opportunity to reshape their acquisition culture without considerable work required for full reinvention. The most innovative firms in the United States and allied industry, such as Alphabet, Amazon, Apple, AT&T, Autodesk, Disney, Microsoft, Netflix, Qualcomm, Salesforce, Shell, SpaceX, Tesla, Visa, among others, offer unique external benchmarking frameworks for the DON to consider and adopt. These leaders in innovation share one primary theme: they prioritize people and products over processes. Leading inventive companies do this by exercising two central behaviors across their organizations: incentivizing their workforce to pioneer risky solutions and embracing "fast failure." The Navy and Marine Corps acquisition community should espouse and promote these proven cultural principles via two major institutional transformations. First, provide acquisition force members with inspiration, time, and opportunity to conduct "grass roots" invention by offering "innovation work schedules." Second, fundamentally accept high risk for innovation and "green light" high payoff projects by creating a "DON disruptive innovation fund." These actions will transform the Navy and Marine Corps acquisition community into a leading innovative organization by leveraging the best human talent to deliver novel and agile products rapidly to warfighters.

## Application of Process Without Perspective

For highly entrepreneurial and innovative firms, "the people and products," not processes, define their success. Walk into the main lobby at any great company and you will find artifacts of their amazing employees and "best in class" products displayed prominently. At those same locations, you will not see copies of their instruction manuals and administrative memoranda. Why? Great companies prioritize their people and products over processes.

Executives at world leading firms strategically understand the nature of customers and markets, both of which may at times exhibit volatile change. To remain competitive, great companies ensure top human talent maintains a constant product focus, with an emphasis on leveraging agility to quickly pivot and create disruptive change, ultimately capturing demand faster than competitors. These same executives also possess the humility to realize innovation represents a difficult and uncomfortable challenge. An executive vice president for a leading technology firm confided, "Innovation is hard. The very term implies doing something risky and new. New is not easy. New is not comfortable."[2] To make their organizations comfortable with innovation, industry leaders create both a structure and culture of highly distributed and effective innovation systems. These ecosystems self-regulate to deconstruct process, harness and stimulate creativity in human talent, and remove barriers to launch profitable new products at both scale and speed. To preserve and improve these systems, the best firms hire, develop, empower, and promote human capital grounded in both creative and critical thinking—setting the conditions for a strong culture of novel product focus.

In contrast to industry's winning innovation culture, the DON acquisition community regularly prioritizes processes above people and products. Evidence and exhibits of our strong "process culture" may be found in many areas. Below are a few examples you may recognize:
• Program or project schedule slip in order to comply with obscure process requirements that do not improve the product or enhance value to the government.
• Creating statements of work or statements of need before understanding true customer needs and priorities.
• Requiring lower-level acquisition category programs to follow Acquisition Category I processes.
• Threatening negative consequences for failing to execute budgeted funding while there is no consequence for failing to deliver a product.
• Re-starting projects when new people join the team to insure organizational alignment.

• Elevation of Program Manager-level decisions to executives for "process rulings."
• Waiting for a "crisis situation" to develop before considering departing from a process.
• Cumbersome instructions, manuals, and training to govern and teach processes.
• Hiring employees to create or manage processes before evaluating the necessity or value.
• Perpetually retaining employees solely to operate and govern processes already determined to be obsolete because of automation or lack of future requirement.
• Promoting individuals for strong record of process compliance without regard for their record of product delivery.

Our DON acquisition community process-focused culture exists due to the commonly perceived and attractive assertion that process limits risk and creates repeatable, orderly, expected outcomes. Ironically, "one size fits all" processes act as administrative barriers that increase risk, stifle innovation, and reduce speed to the fleet. Our military adversaries have eliminated many of these process barriers, enabling them to attain a disruptive edge over the United States Navy and Marine Corps. For example, insurgent forces rapidly developed the lethal improved explosive device and perfected the tactical use of small unmanned aerial systems without strict process requirements; while at the same time, United States and allied counter-solutions, burdened by process, took years to scale and field. Many attributes of DON process culture result from a lack of "careful deconstruction of the conventions and dogma constraining creative" thinking and customer focus within acquisitions.[3] Elon Musk, Chief Executive Officer at SpaceX and Tesla, has stated,

> The problem is that at a lot of big companies, process becomes a substitute for thinking. You're encouraged to behave like a little gear in a complex machine. Frankly, it allows you to keep people who aren't that smart, who aren't that creative.[4]

To avoid the self-destructive process culture Musk describes, our large acquisition community must apply fresh thinking to drive people and product focused behavior. This is done by inspiring human talent to innovate and ensuring failure truly is an option.

## Incentivizing Innovation

The DON must incentivize and inspire organic grass roots innovation. These incentives include, but are not limited to physical, intellectual, financial, and market oriented. Healthy innovation incentives drive behavior change and foster creative ownership in the rapid development of solutions. Innovative firms have found many of their greatest products originated organically from mid- and lower-level employees. For example, Alphabet's top management team does not create grand disruptive product development strategies; rather, they have cre-

gives adventurous users the chance to evaluate new concepts.[7] Without these types of incentives in place to encourage innovation and break down bureaucratic barriers, many of Alphabet's best grass-roots ideas (i.e., Gmail, AdSense, Google News, and many more) would have continued to go unrealized, with critical organic human talent eventually taking these ideas to competitors for action.

As with Alphabet, incentivizing and inspiring innovation does not always originate from the senior executive level of governance. Rather, middle management has even more responsibility for and impact on removing the insulation between good ideas and the decision makers that are capable of investing in them. Large organizational structures have decisional layers that force new and innovative ideas through a rigorous filtration process. At each layer within the organizational strata, the idea or

At present, these conditions do not exist. Rather, employees are directed to solely follow the processes governing their omnipresent work. In the form of human talent incentives, the don acquisitions community does offer civilian employees both flexible work schedules and compressed work schedules. Senior leaders within the Navy and Marine Corps should work with Congress and the Office of Personnel Management to introduce a "innovation work schedule," where select employees spend ten to twenty percent of their work time being compensated to create disruptive new ideas and products outside of their primary work duties. These employees would pivot focus to creating new ideas and products and providing their findings to middle managers, who ultimately would advocate for their next steps of development with senior management. If proven viable, the employees would have the additional opportunity to depart their traditional role to follow and improve their innovations as they mature along a traditional acquisition strategy. This human talent incentive, already replicated with great success across American industry, has the great potential to fit and inspire our best human talent to do much more for the Navy and Marine Corps rather than just simply "follow the process."

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ated a cultural environment spawning "Googlettes," small, start up, grassroots projects, created via organic employee concepts and turned into valuable new products and services.[5] Google looks for recruits who have off-the-wall hobbies and unconventional interests—people who are not afraid to defy conventional wisdom—and, after it hires them, encourages them to spend up to 20 percent of their time working on whatever they feel will benefit Alphabet's users and advertisers. The company organizes much of its workforce into small, project-focused teams with only a modicum of supervision (one Alphabet manager claimed to have 160 direct reports!), but with more lateral communication and intramural competition.[6] The firm's inventors post their most-promising efforts in a crowd sourcing-like fashion on the Google Labs website, which

initiative is modified a little bit until it no longer resembles its initial form, forming to the process to look like every other product. Risk associated with innovation must be provided to decision makers in an unfiltered fashion as leaders of innovation recognize that not every creative idea will achieve smashing success.

Grass-roots innovation must be inspired and enabled at every level in the organization to generate a true culture of innovation. Leadership must commit to innovation with initiatives and priorities aligning with their stated mission and addressing their most pressing problems. Similar to the Alphabet model, DON acquisition senior management must provide their most talented civilian employees, Sailors, and Marines with the inspiration, time, and opportunities to create organic disruptive innovation.

## Embrace Fast Failure

The Navy and Marine Corps must embrace fast failure to drive innovation. A chief technology officer at a major telecommunications/media firm told us,

> Thomas Edison, the world's greatest inventor, often said, 'I failed my way to success.' Bottom line: If you're never failing, chances are you're not innovating much. You are probably doing something easy, boring, or worse, lying to yourself.[8]

Innovative companies bet billions of dollars each year against many risky grass roots employee generated ideas. History postures that most of these programs and projects will ultimately not succeed. Fast failure represents an inevitable outcome when operating inside of an innovation culture. The ultimate challenge for leadership: un-

derstanding uncertainty persists and how mitigate it.

Navy and Marine Corps acquisition managers are faced with a "Catch 22" proposition: Incrementally improve the performance of current large investment products while discovering high pay off disruptive innovations to increase the organization's competitive warfighting advantage. These leaders often prioritize resources to the success of the incremental improvements, as these heavily invested items are funded via accountable budgets. This very situation creates an institutional fear of failure, proven in industry to act as an "innovation crippler." However, this type of fear should be avoided, as early and fast failure during innovative projects generally leads to new learning and results in disruptive positive outcomes.

DON acquisition community leadership behaviors stimulating fear of failure should be replaced with activities encouraging fast failure type of innovation. These include but are not limited to: accepting inherent risk, valuing fast failure as an important learning opportunity, providing sufficient time for innovative ideas to develop, encouraging champions to inspire and overcome bureaucratic resistance, and mentoring subordinates on the types of acceptable failure. Middle managers often say "no" to risky grass roots inventive ideas because of mismatched funding vehicles; it is difficult for program managers to fund something new if they have to plan for it three years in advance of its actual inception. Industry often faces the same problem, but ultimately still achieves innovation success. They see high risk, high pay off opportunities as true "investments." As such, great firms set aside investment funds in distinct accounting lines to place big bets on great organic employee ideas, without draining money away from mature "core" programs.

To break similar military funding bureaucratic process barriers, Navy and Marine Corps acquisitions senior executives must work with Congress to create a DON disruptive innovation fund. This budget item should be controlled by the Office of the Assistant Secretary of the Navy for Research, Development,



*A F-35C Lightning II with Marine Wing Fighter Attack Squadron 314 lands at MCAS Miramar, CA.* (Photo by Sgt Dominic Romero.)

and Acquisition and be used to "green light" innovative employee ideas and products via a "Shark Tank-like" format across the various Systems Commands and Program Executive Offices of the Navy and Marine Corps. This would eliminate most of the institutional risk of high failure/high payoff start-ups within the DON, enabling inspired human talent to create game changing ideas faster than our adversaries.

## Conclusion

If the United States Navy and Marine Corps acquisition community continues to focus on delivering slow paced incremental capability improvements to Sailors and Marines, then our adversaries will more rapidly gain ground and ultimately overtake our speed of technical development. Instead, we must heed the call of our senior acquisition executives to embrace innovation, taking the necessary steps to inspire and empower the workforce to bring their freshest ideas to decision makers for further investment. U.S. and allied industry have perfected ways to facilitate innovation culture change, focused on prioritizing people and products over processes. Specifically, providing more inspiration and time to employees to invent via new flexible work schedules and removing the fear of innovation failure by establishing a DON disrup-

tive innovation fund must occur for the DON to take the next step toward innovating and delivering products meeting future warfighter needs at a pace preserving a disruptive competitive advantage against our adversaries.

### Notes

1. Gordon E. Moore, "Cramming More Components onto Integrated Circuits," *Electronics,* (Basel, CH: MDPI, April 1965).

2. Informal interview between authors and "Fortune 500" company Executive Vice President on 4 March 2020.

3. Gary Hammel, "The Why, What, and How of Management Innovation," *Harvard Business Review*, (February 2006), available at https://hbr.org.

4. Chris Anderson, "Elon Musk's Mission to Mars," *Wired Magazine,* (October 2012), available at https://www.wired.com.

5. "The Why, What, and How of Management Innovation."

6. Ibid.

7. Ibid.

8. Informal interview between authors and "Fortune 100" company Chief Technology Officer on 4 June 2020.