The 2018 Hybrid Logistics Symposium (HLS) took place from 26 February to 1 March 2018 at the University of California, San Diego (UCSD) campus. The three-day symposium was sponsored by the Deputy Commandant, Installations & Logistics (I&L), LtGen Michael Dana, in partnership with UCSD, with the goal of identifying the people, processes, and technology needed for logisticians to effectively support the warfighter in the 2025 fight. Over 100 participants were divided into 10 cohorts comprised of a diverse range of educational and military experience, various MOSs, ranks ranging from lance corporal to captain, as well as Federal employees. The symposium included briefs from various military organizations, panel discussions, and UCSD presentations and lab tours. Participants were exposed to technology and ideas that included: expeditionary medicine, smart cities, design thinking as an alternative way to frame problems, wearable sensor technology, holo-lens, and unmanned aerial vehicles. In addition to learning about new technology and initiatives within the Marine Corps, each cohort was challenged to develop three to five ideas that would increase logisticians’ capabilities in the 2025 fight. The ideas were ultimately briefed to the Commandant and the Deputy Commandant, I&L, and the winning cohort was chosen based on their idea’s ease of implementation, overall benefit to the Marine Corps, and creativity. In Cohort 7, we had a diverse mix of personalities, experiences, and interests but were quickly able to “form, norm, and storm” based on our shared and passionate recognition of the need for innovation in the Marine Corps logistics community. We agreed that innovation was not simply new technology but also the adoption of new ideas and practices by a group. We also decided that the problems facing the logistics community stem from the lack of holistic management for how the Marine Corps plans to man, train, and equip future generations for warfare. With only three days to come up with a plan, we focused on what we thought was the solution to most of the Marine Corps’ problems: the people. By empowering the right people and putting them in the right place, we would then be able to posture the community for the future fight. The three ideas we ultimately briefed included: create an abilities placement program that focused on talent development and management, sponsor a logistics podcast focused on innovation sustainment, and generate a logistics data strategy to make data informed decisions.

Figure 1. Cohort 7’s ideas.

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the Corps. Ensuring the right people are in the right billets could be accomplished simply with a spreadsheet listing people who participated in an innovation challenge, have special education or training, or even were a part of the HLS. Senior leaders could use this spreadsheet to help influence where a Marine would go for their next duty station. Influencing talent management could also be accomplished through a tool like “USA Jobs” that allows Marines to showcase their individual skills, education, and interests as well as help leaders build dream teams. This tool will give more incentive to individuals to educate themselves outside of their MOS and create a place where talent, not necessarily MOS and grade, could be the driving factor for placement.

An often discussed issue during the HLS was how to ensure innovative ideas are effectively implemented so that they can ultimately lead to organizational adoption. Innovation sustainment requires a broad base of support that is facilitated by constant communication. This led to our second idea to start a logistics podcast. The podcast would focus primarily on logistics by interviewing military and private sector leaders; include updates on projects, concepts, or exercises within the community; and become a forum for sharing clever regional best practices. It would facilitate flattening the chain of command so that ideas could be broadcast more easily, provide ways to collaborate with industry and academia, and ensure that logisticians know what was happening within their community.

Our final idea involved ensuring the Marine Corps makes better data-informed decisions. We briefed that the Corps needs to develop an overall logistics data strategy to identify what decisions the Marine Corps needs to make, the metrics required to make those decisions, the structures necessary to store these data, and tools that employ those data to enable decision making. Data analytics, cloud computing, and artificial intelligence have become buzz words, most often used by people who think that we can fix our problems by simply adding more machines. But before using new and innovative technology, the Marine Corps must ensure that they have the right data to input into that technology, and that this data is available to the people who will inform decision makers. This becomes increasingly difficult when the logistics community has a myriad of systems that do not interface, and those systems often contain redundant, useless, or unformatted data. Only if we have data that are accessible and useable can we automate processes and leverage new technology to ultimately enable better decision making.

We had ten minutes to brief our three ideas to a board consisting of the Commandant, DC I&L; the Commander, Marine Corps Installation Command; and members of Defense Innovation Unit Experimental, MD5 National Security Technology Accelerator, and UCSD. The symposium was an opportunity for learning and the most important lessons learned include:

Communication. Many of the ideas briefed by fellow cohorts were already in the process of being implemented by I&L or other organizations. Technology, which participants assumed was cutting edge, had in fact been in use for years. It is hard to be innovative when the lowest levels do not know what is going on within the community. Increased communications within the logistics community is vital, and it must move top down, bottom up, and laterally. This is one of the main reasons why we decided to promote a logistics podcast as a way to improve communication at all levels.

Capitalizing on industry and educational institutions. The Marine Corps says it wants to be innovative, but it lacks the resource and manning to truly be so. Even the DOD, which once had a
research and development arm so robust as to create the Internet and GPS, now has a research and development budget that is dwarfed by those of industry and educational institutions.\(^1\)

To maintain a competitive advantage, the Marine Corps must actively create and maintain relationships with industry and educational institutions. This includes leveraging organizations like Defense Innovation Unit Experimental, MD5, and NASA Ames but also modifying the focus of current Marine Corps programs. The 2018 Commandant’s Professional Intermediate-Level Education Board only had two spots for industry fellowships. This program has too few spots and also excludes junior officers as well as all enlisted personnel, which causes two problems. First, it does not give the Marines the opportunity to learn and leverage industry best practices for the good of the Corps. Secondly, talented Marines with interests in these areas are not likely to want to wait until they have been in the Marine Corps for ten years to be granted the opportunity to explore and apply these concepts, so they will leave the Corps for jobs in industry.

Re-occurring problems and fixing processes. Many of the problems discussed throughout the HLS were not new. Therefore, instead of simply adding more systems or buying more hardware, the Marine Corps needs to invest in long-term solutions to fix process problems. Global Combat Support System-Marine Corps is an obvious example.

Streamlined process. Private industry has already solved problems comparable to problems in the Corps. No Marine needs a class to buy new socks on Amazon, but they definitely need a class to figure out how to use the GCSS.

Importance of people. Most of the cohorts focused on Marine training and education during their presentations. This further illustrates the broad consensus at the lowest levels that it is important to get the right Marine in the right job, and that individual training and education empowers individual initiative and innovation.

Problem framing. Organizations that do not correctly identify underlying problems are unable to solve those problems. The easiest way to ensure the correct problems are identified is through communications. Some problems were misidentified during the HLS, not because people did not care but because they were misinformed. This can be corrected by empowering subordinates with the right information and informing leaders, so they can make informed decisions. It is also important to have the right people framing problems, and the Marine Corps could do a better job of identifying critical thinkers and encouraging them to solve problems by putting them in billets where they can be effective. Otherwise, we will always lose them to industry.

Achievability. Each cohort was asked to use achievability as a measure of success for the ideas they developed. This restricted the range of ideas that could be considered because many important logistics issues fell outside of I&L’s direct sphere of influence. I&L may want to implement a new technology or process, but other commands are also stakeholders in the process (e.g., Training and Education Command, Systems Command), and these commands must also be willing to tackle the issue. Multiple stakeholders makes innovation implementation increasingly complex. While achievability will always be a large influence in any decision to innovate, it became evident during the symposium that a strong understanding of the considerations and incentives influencing multiple stakeholders is necessary for implementing innovations.
effective change. The Marine Corps, therefore, is more likely to internally developed achievable innovation if its lowest levels have an understanding of the stakeholders that are involved in actually implementing that innovation.

Quantifiable Investments. It is difficult to quantify the value of long-term investments simply because they take so long to measure, and sometimes the initial metrics are wrong. It is easy to say that HLS success should be measured by the number of ideas that get funding and ultimately become programs, but this discounts the second and third order effects from getting a group of motivated people together to try and solve problems. The relationships made, the learning that occurred, and the implementation of ideas when participants return to their home stations is much harder to quantify but could potentially have a larger impact on the Marine Corps as a whole. But an individual’s hope in the future of Marine Corps logistics is ultimately going to create a longer-term investment than one idea becoming a program of record. It comes back to the Marines, motivating and educating them is going to create exponential change within organizations.

The HLS provided a unique opportunity to learn about the logistics community, interface with non-military leaders in innovation, and meet passionate people working to make the Marine Corps more adaptive and efficient. As stated previously, innovation is not simply new technology, rather it is implementing and then accepting new ideas within an organization. The HLS was a step to changing the organization by leveraging those within its ranks. By hosting and funding the HLS, I&L proved that thinking about the future of the logistics in the Marine Corps is not free and is worth resourcing. And even when the HLS is long over, the relationships gained and lessons learned will continue to pay dividends.

Notes

1. Statistics regarding the extent to which the DOD budget is overshadowed by industry and educational institutions are available at https://www.aaas.org.
2. Ibid.

>Authors’ Note: The members of Cohort 7 are: Capt Matt Audette, Capt Sarah Bergstrom, Cpl Robert Boudreaux, 2ndLt Ben Cohen, Sgt Graciela Edwards, Capt Elle Ekman, Mr. John Hawkins, Capt Anthony Suh, Capt Johnathan Wallace, and Sgt Wei Zhang.