HIGH-VELOCITY LEARNING
A Vision for the Navy

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In 2016, Chief of Naval Operations (CNO) ADM John Richardson made High-Velocity Learning (HVL) one of the four "Lines of Effort" to help achieve the Mission Priorities laid out in the Navy's "Design for Maintaining Maritime Superiority" initiative. Before being nominated as CNO, Richardson was the Director of the Navy Nuclear Propulsion Program (often referred to as "NR" for Naval Reactors), which adopted much of the framework that would later be named HVL when the program was established in the late 1940's. From the start of the NR program, there has not been a single reactor-related casualty or escape of radiation. Other organizations working in dangerous and complex areas, such as the Soviet NR, NASA, or other civilian nuclear power facilities, have very different histories compared to the US NR. This program is among many examples of HVL given in Steven Spear's book, *The High-Velocity Edge*.[1]

What is High Velocity Learning?

Steven Spear coined the phrase High-Velocity Learning in his book, The High-Velocity Edge. In it, he describes the fundamentals of this concept and the four capabilities needed to be a high performing organization, or what he calls a High-Velocity Organization. For Spear, it is not enough to merely copy what other companies are doing. Nor is it enough to learn what great companies have done in the past. But companies must constantly and at ever-increasing speeds learn about their own existing processes, finding pockets of ignorance in what they already do in order to identify ways to improve it. To do this, Spear offers four capabilities that companies must master.

The Four Capabilities

1. Build Systems of "Dynamic Discovery"

With the speed and complexity in which products and services are provided in today's environment, it is impossible to think through a "perfect process." While organizations should create processes using all the information known, these processes should also have built-in tests to identify problems. Spear also suggests making predictions of what outcomes will result from those built-in tests before any measurements are conducted. This could mean predicting an outcome for a formal process, like how long it takes to put a windshield on a car, or for an informal one, such as what knowledge comes from any particular meeting. One can judge an outcome as good or bad, even without a prediction. But with a prediction, one can also determine if a process is understood or not understood.

2. Swarming and Solving Problems to Form New Knowledge

High Velocity Organizations are adept at: detecting problems in their system where and when they occur; containing those problems before they have a chance to spread; and diagnosing and treating the causes so the problems do not reoccur. "Swarming" a problem has two benefits. First is preventing a problem's impact from spreading. Second is the gathering and preserving of essential and contextual information that could otherwise be lost to fading memory or changing circumstances. For Spear, solving a problem is both an end to itself and also a means to two other ends – creating new knowledge which can be put to later use and developing greater problem-solving capacity in the people who are addressing the problem.

3. Sharing New Knowledge throughout the Organization

All too often, discoveries of better processes and methods remain isolated with those that discovered them. For High Velocity Organizations, it is essential that new discoveries are shared throughout the organization. Further, it is more than broadcasting solutions but also sharing the discovery process. That is, sharing the context of the problem, how the solution was discovered, and why it will work.

4. Leading by Developing Capabilities 1-3 in Others

Leaders must develop those for whom they are responsible so that the organization's ability to be self-correcting, self-improving, and self-innovating is practiced widely and consistently. Manager's efforts are directed towards problems which could not be solved at lower levels. But it is not managers' responsibility to step in and solve the problem themselves. Instead, they should coach those involved with the problem to find the best solution. Lastly, managers should be held accountable for supporting and practicing these capabilities.

Early Examples of High Velocity Learning in the Navy

Described in an article titled, "Making High Velocity Learning Work for You," the US Naval Academy is taking initiative by holding a monthly meeting in a senior officer's living room called "Unplugged."[2] Each meeting's participants include several Midshipmen, officers of several ranks, and a discussion leader. The discussion leader kicks off the meeting discussing a topic they are experts in and then opens the discussion to all participants. Former discussion leaders include the Mayor of Annapolis, a Maersk Captain, and astronauts. Unplugged is designed to get people from various circles and levels of experience sharing information and their perspectives. It also encourages participants (especially those in lower ranks) to be inquisitive and thoughtful about important topics in today's Navy.

Two examples highlight the CNO's emphasis on employing technology in executing HVL in the Navy. In the first example, instead of handing recruits large, heavy books from which to learn, the Navy has been issuing tablets.[3] Richardson has said, "We are finding young recruits are learning much faster with tablets. It's the way they have come to absorb information but also allows more flexibility for where, when, and how they learn."

The other example of technology being used to ingrain HVL within the Navy can be found at the Naval Undersea Warfare Center in Keyport, Washington.[4] A practical problem has been identified throughout the Navy: the inefficiency of training. Richardson has said, "How long does it take to bring someone in through the door, get them processed and then make them an effective worker down on the shop floor, in the dry dock, whatever their job may be?" In Keyport, they are studying training efficiencies and total ownership cost reductions by using virtual reality technology to enhance maintenance and training support provided by Naval Undersea Warfare Center-Keyport. The article also states the Navy will widen its use of simulators, online gaming, and analytics in the near future to bolster their training programs.

References

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