Maker Space Collaboration: Sharing Best Practices and Lessons Learned for Facilities, Equipment and Personnel

Objective

The project aims to expand our understanding of the US Marine Corps Innovation Labs with a special emphasis on lab infrastructure and service members' capacity to engage with new technologies, conditions, and needs of USMC. The research will address the topics of innovation mission of the Marine Maker Movement, types of innovation approaches, technologies, and hands-on lab experiences that would be best used for the Innovation Labs, and the way those experiences should be disseminated.

Why It Matters

USMC innovation labs, along with additive manufacturing (AM) cells, will have a significant impact on future Navy and Marine operations, and these spaces can be important catalysts for learning, collaborating, and experimenting with rapid prototyping and AM. The same groups can also accelerate the adoption of new technologies within the USMC. Providing those spaces with necessary infrastructure, guidance, and support material are crucial to avoid obstacles to technology adoption and maximize the potential for their sustainment and growth.

Keywords: additive manufacturing, innovation, technology adoption

Current Status and Future Work

- Completed: (1) Conducted literature review, (2) Created several instructional modules and conducted online subject matter workshops.
- To do: (1) Data collection on innovation and technology adoption.
- Future Work: Conduct a longitudinal study on adoption of AM and innovation by service members in the USMC.

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