# Accelerating Acquisition of Tactical Expertise in III Structured Combat Settings



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SYSCOM: Marine Corps Systems Command (MCSC)

**Program Sponsor:** Office of Naval Research (ONR)

**Other Potential Programs:** 

Veterans mental health, law enforcement, military officers basic training

## Current TRL: 3 Projected TRL: 6 / Q3 2023

## **Keywords:**

Warfighter readiness, cognitive agility, cognitive transformation, decision making

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## THE CHALLENGE

Cognitive agility among leaders is an increasing need in the military as well as in business. Further, more roles are being tasked with leadership responsibility. Because cognitive agility requires learning from experience, finding ways to provide "experience" and the learning that results in immersive and reality analogous ways is the challenge.

## **THE INNOVATION**

FutureView is a technology platform that instantiates 20 years of research on Accelerated Learning using a specific, proven application of cognitive transformation theory. The method in this technology has been tested in 9 industries among more than 7,000 people. For the defense industry, it promises to provide the kinds of experiences in an open-ended rehearsal architecture that lead to learning through iterative trial and error experience. The difference is that highly dangerous operations can be rehearsed without actual risk to participants. Research has shown that – with the cognitive transformation model in this platform -- participants will learn the consequences of decisions and gain higher levels of expertise with greater retention due in part to the underlying behavior and decision tracking in the back end of the technology. This enables detailed feedback to participants on the quality of their decisions and the delta between their decisions and those of someone with high levels of expertise in the same situation.

## THE NAVY BENEFIT

FutureView is a cost-effective, scalable, and portable way to accelerate expertise through "experience" that feels like real situations without the risks. Exercises can be more realistic and content rich without the expense or risk of field exercises with the same fidelity.

## THE FUTURE

FutureView has been successfully used for several years in industries where expertise is "mission critical". The goal is to expand the reach of the technology to new domains and increase its portability and ease of use. The final result will be a platform that subject matter experts can use to design their own training scenarios and feedback systems without having to be cognitive scientists or experts in cognitive systems.