



Evaluating the Measure of Effectiveness of Using a Deployed Command and Control Systems on a Land Battlefield

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Content:

- With military systems becoming increasingly connected and more agile to handle multiple scenarios through technological advances, the challenge remains to design a command and control (C2) system that fulfills the rising user expectation given the constraints enforced in the land battlefield. There is a need to manage the users' expectation to ensure the effective use of the system for their operations through constant evaluation of the measures of effectiveness (MOE).
- The Langford nine-step methodology provides a repeatable process to successfully develop 12 pairs of meaningful MOEs using the integrative framework to evaluate the effectiveness of using a deployed C2 system in the land battlefield. The integrative framework provides the comprehensive guidelines to develop the MOE with objective values and subjective criteria.
- Using the nine-step methodology and the integrative framework, 12 pairs of MOEs are developed to evaluate the Battlefield Management System (BMS).
- The nine-step method's repeatability facilitates the evaluation of the effectiveness of the C2 for each system refinement (firmware/software/system upgrade) or new requirements (additional of sensor/communication system/protocol). Each evaluation should indicate opportunities for the system, process, and organization to improve. The developed set of C2 MOEs allows stakeholders to evaluate the system, and the use of the integrative framework to produce repeatable MOEs provides cost-savings opportunities for system refinement and a new iteration of system development.
- Further research can deploy the 12 pairs of MOEs to evaluate the use of deployed C2 systems in different land platforms