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Establishing a methodology to develop complex sociotechnical systems

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Abstract

Many modern management systems, such as military command and control, tend to be large and highly interconnected sociotechnical systems operating in a complex environment. Successful development, assessment and implementation of these systems are very difficult as they often are sensitive to environmental influences and integrated within a larger system. Cognitive Work Analysis (CWA) provides a formative framework for developing, assessing and improving these systems. When applied within a structured methodology, based on systems analysis and development, CWA will promote understanding of the human and work aspects of the sociotechnical system, leading towards a successful implementation and improvement of a complex sociotechnical system.