Proceedings of the 2020 Annual General Donald R. Keith Memorial Capstone Conference
West Point, New York, USA
April 30, 2020
A Regional Conference of the Society for Industrial and Systems Engineering

A Value-Based Approach to the Data Science Directorate

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Author Note: The authors listed above are currently first-class cadets at the United States Military Academy at West Point and worked under the direction of their advisor, LTC Randal Hickman. This project was completed as part of a graduation requirement for their senior capstone course, supporting the Network Enterprise Technology Command (NETCOM) Data Science Directorate (DSD). The team would like to thank DSD leadership, AI Task Force personnel, the Department of Systems Engineering, and the Army Cyber Institute for all their support.

Abstract: The growing importance of data science capabilities motivated the expansion of the Data Science Directorate (DSD) at the US Army's Network Enterprise Technology Command (NETCOM). Initially staffed through partnerships with the USMA Army Cyber Institute, NETCOM requested systems modeling and decision support to facilitate the expansion of the DSD. After scoping and refinement through the NETCOM DSD, this cadet research focuses on the development of the Pittsburgh-based Data Science Center (DSC). A value-focused approach motivated both qualitative and quantitative analysis informing the decision process throughout the DSC build, focusing on physical location and manning opportunities. A mixed recommendation spread DSC personnel across several collaborative organizations in Pittsburgh including the AI Task Force, the Software Engineering Institute (SEI), and CyLab at Carnegie Mellon University. The recommendations are being implemented at this time by DSC Pittsburgh.

Keywords: DSC Pittsburgh, Scope, Value, NETCOM DSD

ISBN: 97819384961-8-9