OVERVIEW

The Center for Operational Analysis (COA) is the premier research facility within the Air Force Institute of Technology (AFIT) Graduate School of Engineering and Management, which directly supports Department of Defense (DoD) strategic objectives. Throughout the DoD, there is a common theme regarding problem solving for the future: a continuous effort to achieve “greater agility, innovation, and integration” (National Military Strategy, 2015). In the Air Force Future Operating Concept (September 2015), operational agility is defined as “the ability to rapidly generate—and shift among—multiple solutions for a given challenge.” Efforts to increase AFIT’s operational agility include new capability developments ranging from advancing and modernizing education to operational employment through innovative approaches to state-of-the-art training that utilizes modeling and simulation. This constant evolution requires institutional changes in the COA’s approaches to problem solving, and consistent advancement in the pursuit of rapidly changing technology that continues to revolutionize everything we do. In short, these measures are a call to the future.

Recognizing this “call to the future,” the COA must become more agile in leveraging technology and alternative learning opportunities. Through synergy between the Graduate School of Engineering and Management, Department of Operational Sciences’ staff, and with the new, increased reach-back potential to our industry partners, the COA will increase its agility and support the Chancellor in achieving his vision of AFIT becoming “… an internationally-recognized and respected leader for defense-focused technical graduate and continuing education, and related research and consultation.” To facilitate this transition, the COA is being strategically rebuilt, repurposed, and refocused to fill the information, knowledge, and research gaps between the DoD, Air Force, academia, and our industry partners.

COA Vision (FY16-FY18)

To be the DoD’s world-class logistics, operations, and supply chain management research center of excellence.

COA Mission (FY16-FY18)

To develop informative and operationally relevant research which meets emerging functional, technical, and analytical needs of the Air Force and DoD.
Statement of Intent

The COA is dedicated to solving real-world operations and logistics challenges facing the Air Force and other organizations within the DoD. We directly support our collaboration sponsors with faculty-lead, student-driven research on a 12, 18, or 36 month graduate research project, thesis, or dissertation. The refocus of the COA’s strategy will add more research resources to the COA, contributing to existing research efforts and expanding our facility’s research capabilities as a whole. This strategic plan takes us one step closer to achieving our vision of becoming the DoD’s “world-class, self-sustaining supply chain management, logistics, and operations research center.”

In order to increase the COA’s resources, a contract vehicle is being utilized to expedite and expand research efforts. With the continuing support of AFIT students and academic instructors, and with the new, increased reach-back capability to our industry partners that the contract provides, the COA will continue to work towards the aforementioned National Military Strategy to continuously achieve “greater agility, innovation, and integration.” Our strategic plan employs our unique ability to access, synthesize, and process knowledge to further enable operational agility, heighten innovation, and fully encompass integration to ensure we are leveraging a comprehensive toolbox of technology and human resources to build and enhance the force of the future and the Air Force of tomorrow.

Looking forward, the COA has identified nine core capabilities that it possesses to capitalize on. Referencing Figure 1, these capabilities are listed down the left hand side. Across the top of
Figure 1 are the six major swim-lanes in which the COA plans to strategically operate and apply the nine core capabilities. The six targeted verticals represent areas with the greatest need for agility and innovation where our skills and the skills of our contracted resources will provide the most effectiveness.

As the figure shows, the COA will develop major, strategic relationships with the senior-level executives of industry partners. Through these professional relationships, we will capture new, industry-leading ideas for innovation and best practices. New ideas for innovation can also be captured through interactions with research partners. Moreover, lessons learned through both of these interactions can be cycled back into the COA, and utilized to assist in solving similar, defense related issues. In addition to linking the COA to research and industry partners, this shift towards self-sustainment, objectivity, and analytical independence allows it to serve as a great resource to reach into different governmental agencies and share information we have acquired.