

Key Takeaways from “Beyond Targeting: The Untapped Role of AI in Military Decision-Making”

AI decision-support systems (AI-DSS)—software systems that use a variety of AI tools to ingest, generate, share, and act upon information—have applications far beyond the targeting processes pioneered by the [XVIII Airborne with the Maven Smart System](#) (MSS). Nearly any decision process that requires interpreting data, assessing a situation, making choices, and implementing those choices (and often repeats those steps in a regular cycle) can benefit from AI-DSS tools. Some may even achieve an impact comparable to what the XVIII Airborne Corps saw with MSS: an ability to do with 20 operators what had previously required 2,000.

Previous discussions of AI-DSS have relied on news reports and often vague notions of how these systems might be applied in military processes. This paper offers a more concrete examination of AI-DSS applicability through two case studies:

- the **resupply of ammunition** to Army fires units, a process that requires huge amounts of information and substantial coordination to plan and execute; and
- the **Joint Air Tasking Cycle (JATC)**, a decades-old information-intensive 72-hour process for deliberate planning of daily air sorties.

The study details both potential applications in the context of current military doctrine and processes. It also acknowledges that both opportunities come with new risks that must be addressed, even as old risks are retired.

Benefits and Risks of AI-DSS in Two Case Studies

Expected Benefits	Potential Risks
Improved situational awareness of friendly, enemy, and civilian objects.	Diminished warfighter critical thinking (cognitive offloading).
Increased quality and completeness of a shared COP.	Automation bias and the potential to incorrectly trust computer or AI suggestions over human intuition and experience.
Increased decision speed and greater planning flexibility and responsiveness.	Pressure to reduce the time needed or people required for complex judgments.
Increased speed of information sharing, exchange, and analysis.	Less time spent cross-checking information.
Reduction in human errors in manual data transfer or re-entry.	Data failures in either biased or incomplete training data or the data (i.e., sensors) available for decision-making.
Decreased potential for loss of version control.	AI failures (of which there are many, including narrow operational windows/fragility outside training data, state decay, context drift, hallucinations).

Most importantly, our analysis highlights that **the primary obstacle to implementing suitable AI-DSS capabilities in these cases is not software development, but rather accessing the data needed by such tools.**

Recommendations:

1. **Make needed data digitally available to AI-DSS.** The top-level departmental support for efforts to break through any bureaucratic or cultural barriers has never been stronger—now is the time to act.
2. **Examine the best practices that the XVIII Airborne Corps and others are using—including their DevSecOps-style development approach combining operators and software engineers—and adopt and adapt them.** CDAO should collect and promulgate these lessons. CDAO should also resource data and evaluation support teams at the Combatant Commands to augment their AI-DSS development and deployment efforts at the edge. These teams should be staffed with personnel who have the necessary expertise and/or experience to bring to bear the lessons learned and best practices acquired across industry, academia, and the joint force.
3. **Deploy these capabilities to command centers during real-world operations** to develop warfighting best practices, accelerate the growth of a community of experienced users, and provide operational feedback to software engineers.

For more information:

- Download the report: <https://cset.georgetown.edu/publication/beyond-targeting/>
- Contact us: cset@georgetown.edu