Cougaar Software, Inc.
An Intelligent Decision Support Technology Company

Since 2001, Cougaar Software, Inc. (CSI) has leveraged Cognitive Computing technology to reduce complex problems and improve our clients’ decision making. Whether on the battlefield or in the boardroom, today’s leaders are inundated by a deluge of data. CSI’s Cognitive Computing solutions exceed the capabilities of prevailing analytics tools by comprehensively modeling business processes and emulating the human cognition process. The result is unprecedented situational understanding and comprehensive Intelligent Decision Support.

CSI’s core technology, ActiveEdge®, provides a platform for the development and deployment of distributed Intelligent Decision Support capabilities that manage complex problems. CSI has successfully applied ActiveEdge to various command and control, supervisory system and supply chain problem sets. The resulting intelligent automation, reasoning and learning applications provide industry-leading resource allocation, scheduling optimization and predictive analytics.

Adaptive Planning Framework
Success, whether for a military mission or commercial endeavor, is dependent upon informed planning, optimal utilization of available resources, effective monitoring and timely responses to the changing situation. CSI’s Adaptive Planning (AP) Framework is the first functional implementation of the DoD’s concept for Adaptive Planning and Execution (APEX).

In accordance with DoD’s Adaptive Planning Roadmap, CSI’s AP Framework facilitates distributed collaborative planning through automated Intelligent Decision Support for mission management. This capability enables commanders and staff to collaboratively develop and assess mission plans in a distributed manner, using current situational information. The system supports mission analysis / problem framing, Course of Action (COA) development, automated logistics assessment and estimation, and command and control during execution.

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CSI has developed Intelligent Decision Support systems for a variety of governmental and commercial clients.

A Defense Advanced Research Projects Agency (DARPA) effort, Distributed Frameworks for Dynamic Human / Agent Collaborative Problem Solving, investigated patterns for developing agents to optimally orchestrate interaction among collaborators. The framework’s intelligent software agents reason over and manage data collection, fusion and analysis to recognize significant events, allowing human users to focus on core business processes and decision making.

CSI supported the US Army Logistics Innovation Agency (LIA) by providing technical leadership and vision for net-centric environments and Sense & Respond Logistics. CSI’s achievements include the development of a number of key capabilities including a tool which provides intelligent maintenance estimation and recommendations on optimal allocations, capabilities and performance analyses, “What if” simulations, and dynamic monitoring and alerting. This tool was part of the MyProductionPlanner (MPP) suite, specifically MPP3, deployed on LOGSA’s Logistics Information Warehouse (LIW) in 2011.

CSI leveraged and refined the AP Framework to develop the Marine Corp Adaptive Planning (MCAP) Decision Support Tools (DSTs) for the Office of Naval Research. The MCAP suite supports mission definition and distributed collaborative planning within and among Command Operations Centers (COCs). MCAP augments the Marine Corp Planning Process and integrates with other tools in the COC via the USMC Tactical Service Oriented Architecture (TSOA).

MCAP improves the speed and quality of mission planning and task tracking by increasing collaboration and improving Shared Situational Awareness. Tying MCAP’s rich Living Plan representation to battlespace sensors and operations enables warfighters to monitor and adapt their plans and the logistics support dynamically throughout execution.

CSI developed the Class V Adaptive Demand Estimation System (CADES) in support of the US Army Armament Research, Development and Engineering Center (ARDEC). CADES leverages advanced reasoning to provide planning and execution management capability to dramatically improve Class V (ammunition) demand estimation, inventory management, distribution planning and tracking, and supply chain risk analysis.

Conclusion

CSI develops innovative strategies to simplify complexity and improve decisions by leveraging the power of Cognitive Computing technology. CSI’s Intelligent Decision Support services include advanced engineering support in the form of technology consulting, software engineering, and R&D.

CSI is a Veteran-owned Small Business.