

Adsys Controls, Inc.

Knowing the ins and outs of quality military-systems engineering

by Christopher Cussat

In 2003, Brian Goldberg recognized a large market opportunity for unique engineering services while working for Northrop Grumman. Although he originally intended to be an independent contractor providing only his own engineering services, he began talking to prospective clients and quickly realized that there was a significant need within the industry. He ascertained that a group of highly qualified engineers would provide greater value to customers while also sheltering the risks of consistent workflow from a one-man operation. As a result of Goldberg's keen perception of market trends as well as his extensive aerospace and engineering background, Adsys Controls, Inc. was born.

Today, Adsys is an engineering firm specializing in autonomous and dynamically controlled systems. Much of the company's products are advanced computer algorithms, simulations, and analysis. Goldberg, now president of Adsys, explains, "Our origins stem from military systems where we develop items such as autopilots for aircraft, spacecraft-control systems, rocket/missile-guidance and -control systems, and controlled-optical systems for laser and imaging systems."

Adsys' core business areas include vehicle-guidance and -control systems, imaging systems, embedded software, and automated test systems. The most competitive aspect of Adsys is its services—the type of engineering and quality the company offers is very difficult to come by. "On the service side of our business, we often provide a core element to our customer's success on a project," Goldberg says. "The engineering is often at the heart of the system and touches many other areas of a product." He gives the following example: an autopilot for an aircraft is tied into the vehicle's mechanical design, software system, sensing and actuation components, flight-safety system, and systems-engineering design. Because of this, it becomes an enabling technology and reaches far beyond simple modeling, analysis, and software.

For this reason, Goldberg has found that Adsys' biggest competitors are often the customers, because customers want to own the area of design and want

the full control and the knowledge retained by Adsys' employees. "We counter this dichotomy by providing excellent value to our customers and extended support throughout the program and after if necessary," he says. "In the end, our customers recognize this high value we provide and typically enter into lasting relationships."

Adsys' diverse offerings and breadth of experience are also great benefits to its customers. Goldberg explains, "Because our other engineers and I are so well versed in many challenging projects, we understand the implications when a customer approaches us with their own problem. We know the engineering steps that need to occur, the disciplines involved, and the process to solve that problem efficiently."

When it comes to technical services, Adsys provides only seasoned engineers that will produce quality results from the start. "We always stand behind our work and instill confidence in our customers that we will be around to support them long after initial delivery is made," Goldberg says. "Our past customers have learned that we are there to follow through on our work and to ensure that they continue to get value from our products and services." This philosophy has yielded many long-term contracts for the company.

Goldberg describes his leadership style as a blend of the tools catered to the task and the individual that he tries to motivate. "I attempt to empower individuals with responsibility while fostering creativity, and I constantly challenge our team for new approaches to difficult problems," he adds.

Goldberg believes that quality work comes from good customer interaction, good leadership, and a strong engineering team. "The leadership's primary responsibility is to ensure that the engineering team is efficiently meeting the project goals aligned with customer needs—so we try to concentrate on only having performers in our team," he says. "Finally, I think it is important that our employees don't see working for Adsys as only a job—but as a meaningful part of their lifestyle." [P]

STRATEGY TO SHARE

TARGET, APPROACH, SIMPLIFY

First, know what type of customer you are targeting by asking yourself these two questions: "What is your business focus?" and "How do you provide value to your customer base?" Then, find ways to approach those customers and convey the value you provide. It is most important to understand your customers' needs and work with them to align your high-value capability with their specific needs. Never overcomplicate a solution. The best solution is the one that is simplest—and if a problem can be kept simple, then it has the greatest chance of success and the best value.

LOOKING AHEAD...

Adsys Controls has focused R&D efforts for its imaging products as well as support systems for unmanned air vehicles (UAVs). The company is growing its ProLight image-processing platform, adding new hardware and software solutions for both military and commercial applications.