AIS APPLIED INFORMATION SCIENCES

US MILITARY

Unifies data and unleashes insights

Challenge

Help a branch of the US Military to go from a scattered system, to being able to collect accurate, tracked, and actionable data on everything from their costs of materials to the safety their service members.

Solution

In our 6 month engagement, AIS created a solution capable of consuming data feeds and displaying mission-critical information utilizing a number of Azure analytics services, using our own Data Intelligence Framework as a guide.

Results

Improved analytics within the organization and the ability to share data across commands to drive cross-functional insights. Reduced work involved analyzing data and reports while taking advantage of cloud computing cost efficiencies. A legacy system dependent upon aged servers and decades-old software will be able to be retired.

Building a platform for better and faster decision-making

For example, military personnel orders vehicle tires from a longtime vendor without knowing that tires ordered from another vendor last twice as long. Meanwhile, a financial analyst sees wildly divergent tire prices and order frequencies but has no insight into field usage data to make sense of the differences. A group studying the rising trends in domestic violence, illegal drug use, and suicide among service members manually collects data from various sources and then attempts to consolidate and analyze data via spreadsheets to provide leadership with reports.

Like most US military services, this branch is a sprawling organization with thousands of teams independently collecting, analyzing, and acting on data. Siloed data and decisions, manual collection and data wrangling, and the lack of real-time reporting lead to missed opportunities for smarter decisions affecting everything from safety to cost savings.

Tapping into domain expertise to build new data capabilities

AIS conceived, architected, built, and maintains the Azure Common Services used to migrate applications to Azure. With existing FedRamp compliance for critical Azure services and deep experience in Authority to Operate (ATO) acceleration, AIS was able to speed ATO approval for needed Azure services, which was critical to quickly developing the data analytics solution. AIS recommended building the data analytics platform around the needs of an initial group—that manages a budget of more than US$160 billion in support of 700,000 personnel—to get a system up and running quickly. A long search for the right solution was unsuccessful until AIS developed a data platform. This platform enabled our client's group to build a solution capable of consuming data feeds and displaying mission-critical information utilizing a number of Azure analytics services.

Uncover insights faster

Using the data platform, financial analysts have dramatically reduced the work involved in ingesting, processing, and analyzing data and generating reports. Previously, this required pulling together insights from disparate source systems, trading files, and information over email, and performing crude analyses using spreadsheets. Faster insights will have positive repercussions across the organization. For example, the financial analyst who previously saw divergent tire prices and order frequencies from different bases can use the data platform to quickly discern the need to switch tire suppliers on some bases.

Predictive analytics can help the forecast when airplanes will require new tires and other parts—and which vendors to buy them from—leading to smarter purchasing decisions, saving our customers time and money, and keeping their men safe. Or often, one program is not going to spend all its allotted budget in a given fiscal year while others run through their budgets early. With the data platform, decision-makers can see those insights instantly and take action to transfer funds between commands before the opportunities disappear.

Reduce the high cost of IT sprawl

Serving as a single data repository for the entire service, this branch can get rid of stovepipe data repository infrastructure and personnel and take advantage of cloud computing cost efficiencies.

"With the data platform, we can offer a standard set of analytics tools so that personnel can focus on analytics rather than setting up and managing services and tools," Papia says. "We expect to reduce IT costs by at least 16 percent."