Industy: Military

Employees: 100,000+

Geographies: Global

Challenges

- Uncertain demand visibility 12 months in advance
- Inefficient forecasting process
- Lacking data-driven decision making

Solution

- Demand modeling

Results

- Proactive, accurate demand pattern recognition
- Rapid scenario analysis with answers in minutes
- Agile decision making at a moment's notice

Coupa

Air Mobility Command - U.S. Air Force Anticipates Cargo Demand

Constant Change Impacting Demand Predictions

Responsible for the daily movement of military equipment and personnel around the world, the Air Mobility Command of the U.S. Air Force manages availability of an 1,100 aircraft fleet augmented with commercial airplanes as needed. Due to the explosion of e-commerce, confidentally anticipating demand up to 12 months in advance is paramount as they compete for excess capacity with the world's largest retailers and package delivery services.

As Donald Anderson, Assistant Director of Analysis, explained, the Command's traditional methodology was time-series trend forecasting, which worked until "the world changed." For example, a directive by the President of the United States could require a rapid response and smooth flow of missions. Their forecasting techniques were overly manual and couldn't adapt quickly enough to project cargo demand needs. By the time the forecast was updated, decisions were already made.

Project Goal

Develop an airlift forecast with enough accuracy to book commercial aircraft 12 months in advance.

Getting Ahead of Demand Patterns with External Data and AI

With Coupa's demand modeling capabilities, a decade worth of demand, deployment, and global military movement data has been implemented, trained, and analyzed across 42 separate cargo demand forecasts. When asked, "What happens if we are going to deploy aircraft for a new mission at a given location in the world?", within minutes, advanced algorithms are systematically run against a vast set of external casual data to reveal the impact on daily sustainment demand to determine how many aircraft will be necessary to support the new mission. The Command can then purchase commercial aircraft in advance without supplemental forecast analysis. Now, when the world changes, we change the forecast accordingly for expedient, informed decisions.

Securing Air Cargo in Advance with Speed and Confidence

The Air Mobility Command has dramatically improved their demand accuracy by changing their understanding of what factors actually drive demand, such as number of deployed troops by location and number and type of deployed aircraft worldwide.

Within two weeks of setting up the tool, implementing data and generating models, they were producing actual forecasts that exceeded the quality of what had been developed over several years prior. They have completely replaced their former tool with Coupa's demand modeing capabilities to run their 42 forecasts.

Donald Anderson offers this advice when producing forecasts:

Change Your Paradigm

Do not limit the number of external factors you consider

Investigate ALL causal data offered by Coupa

Do not force the forecast to fit your theory — instead, learn new insights

When asked if they can measure savings, Don Anderson explains measuring the money saved is the easy part. More importantly, it's the timing, satisfaction, and comfort of our deployed troops that matters. That's immeasurable but extremely important to the nation, our troops, and to the defense of everybody around the world — because it's the people who are keeping us safe.

"Now we get ahead of demand patterns - and get answers to our leadership before they make their decisions."

— Donald Anderson, Assistant Director of Analysis

Gartner Supply Chain Top 25

23 of the Gartner Supply Chain Top 25 use Coupa for their supply chain decisions, powered by LLamasoft.

$2T in Spend

The Coupa platform contains $2T of spend under management and growing.

$60B in Value

Our customers have identified more than $60B in value from solution insights.