

U.S. Air Force Uncovers Hidden Cargo Demand Patterns with Demand Guru



Challenge

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 a 1,100 aircraft fleet augmented with commercial airplanes as needed. Due to the explosion of e-commerce, accurately 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

Solution

With Demand Guru, 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, Demand Guru systematically runs advanced algorithms 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, Demand Guru changes the forecast accordingly for expedient, informed decisions.

10 Years

External Casual Data

42

Separate Forecasts

Minutes

To Update in Demand Guru

Agile, Data-Driven

Decisions

Results

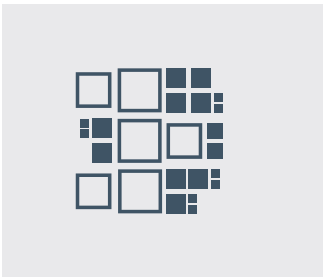
The Air Mobility Command has dramatically improved their demand accuracy by changing their understanding of what factors actually drive demand, such as number of deployed troops by location and number and type of deployed aircraft worldwide.



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 Demand Guru to run their 42 forecasts.

Donald Anderson offers this advice when producing forecasts with Demand Guru:

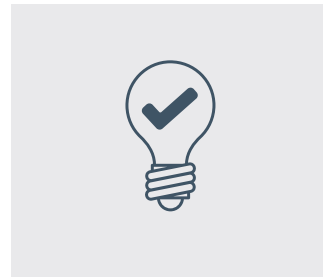
CHANGE YOUR PARADIGM



Do not limit the number of external factors you consider



Investigate ALL causal data utilized by Demand Guru



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.

Contact us at [+1.866.598.9831](tel:+18665989831) or info@llamasoft.com and see how Demand Guru can significantly improve your demand accuracy.

“Demand Guru lets us get ahead of the demand patterns and we can get answers to our leadership before they make their decisions.”

Donald Anderson, Assistant Director of Analysis
Air Mobility Command - U.S. Air Force
