

# accurate **Mx** cost predictions fast

## Case Study Stats, at a glance:



**44**

TURBO JET / PROP TYPES



**70+**

DEFINED OPERATING FACTOR RATIOS



**~ 200**

ENGINE VARIANTS

## Case Study - Situation

The Maintenance (Mx) Reserve rate is a common point of debate between lessor and lessee, during the lease term or when negotiating an onward lease. Due to the cost intensive nature of aircraft and engine maintenance, Mx reserves are critical to cover the costs associated with maintenance events such as engine performance restoration shop visits, airframe structural maintenance checks, landing gear and APU overhauls. Miscalculations of Mx reserve rates can lead to significant maintenance cost exposure for the involved parties and can negatively alter the course of future cashflows. Reliable and accurate maintenance event forecasting combined with updated maintenance costs are essential in predictive analysis of future cashflows related to assets in the fleet.

## Remedy

Accurate maintenance cashflow forecasting depends primarily on 4 core data pillars; technical specifications or parameters of the asset; updated maintenance costs pertaining to the maintenance events; reliable database of maintenance event intervals based on actual operating experience, and intricate, interlinked algorithms which harness the available datapoints. **commVerge** is a modern digital solution designed to address the specific needs of maintenance cost and event forecasting. CommVerge consists of 11000+ algorithms across 200+ aircraft-engine configurations in wide-body, narrow-body and regional aircraft segments. commVerge allows our customers to simulate scenarios which are close to the ground realities of lease negotiations and derive maintenance reserve rates within a span of a few minutes, empowering them to analyse the situation and take appropriate commercial decisions which align with their business needs. With more than 10 different parameters which can be simultaneously simulated, commVerge enables the users to make complex calculations to derive current as well as predictive future maintenance cost exposure. Such levels of complexity is also addressed at scale with commVerge, significantly reducing the risks associated with unchecked expansive spreadsheets, and other grey software such as localised databases and their known associated vulnerabilities and human errors.

## Outcome

Since 2019, Acumen has supported market leaders, especially commercial teams, in the industry in making maintenance cost computations and deploying the commVerge generated data to assist in the completion of successful lease negotiations. For engines alone, armed with 11000+ algorithms, 70+ different operating factor ratios and 200+ aircraft - engine combinations, commVerge provides users with 985+ million on-wing life outcomes. This mitigates the risks of cost exposure due to missed scenarios and allows them to leverage their position in the negotiation. With every passing year, the commVerge database is refined further owing in part to data harvested from 250+ inspections performed by Acumen's Technical, Asset Management, CAMO, Powerplant and Data Management teams.

## Key expert domain stats\*:



**250+ per annum**

AIRCRAFT INSPECTION DATA HARVESTED

\* Overall statistics included here were verified as accurate - SEPTEMBER 2024



**985+ million**

ON-WING LIFE OUTCOME SCENARIOS



**11,000+**

COMPUTATIONAL ALGORITHMS



CONTACT US **TODAY** for a free consultation

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# supporting your

# ASSET LIFE JOURNEY



## Asset Sale / Purchase

Simplify asset trading deals with Projects and Records Digitisation. Providing seamless 24x7 globally available asset information, reports, data and records access.

01

## Active Asset Management

Keep your finger on the pulse, enhance visibility and retain asset values with Lease Management offering real-time executive dashboards, reports, lease and transition manager.



02

## Asset Value Pulse Check

Maintain clear visibility of your fleet values for strategic trading decisions or access online values for prospective assets ; Powered by ISTAT Certified Senior Appraisers together with our comprehensive online app - fin-S.



03

## Asset Risk Mitigation

Integrate the commVerge app with your fleet to fly-forward, analyse future events, and map EOL exposure in real-time. Helping you stay ahead of the curve and actively mitigating asset risk.



04

## Continuing Airworthiness

Designed by CAMO professionals, our integrated systems help you maintain overwatch on the airworthiness of assets throughout the life term, and seamlessly transition assets across global jurisdictions.



05

## Go Completely Digital

Achieve your Digital Transformation goals with our managed IT services. Combining Cloud Development, Integration and Analytics to deliver world class cloud solutions.



06

offering complete  
**DIGITAL ASSET MANAGEMENT**  
solutions

