

Acumen Aviation's Digital Team is embedding AI across SPARTA — the proprietary platform built in-house — and across broader company workflows. AI is being used in two core ways: to build SPARTA itself faster and smarter, and to deliver intelligent automation and AI agents that transform how Acumen serves its clients.

01 AI in Building SPARTA

The Digital Team uses AI tools for backend development, frontend development, and QA/QC within SPARTA — accelerating every release cycle, improving code quality, and enabling faster innovation for clients.

02 AI Agents & Automation Across Acumen

AI agents are being developed and tested across SPARTA work-streams and Acumen's broader operations — automating complex aviation management tasks from records review and data extraction to reporting.

AI Use Cases in SPARTA & Acumen

Active & planned — continuously evolving as the Digital Team innovates within SPARTA and beyond

Gen AI for Lease Management In Progress

An AI-powered chatbot enabling users to search and query lease data already configured in SPARTA — retrieving key terms, dates, obligations and MR provisions instantly. Future phases will include auto-population of lease fields directly from uploaded lease agreements.

AI Chatbot

Data Search

Lease Query

AI-Based Auto Organiser & Segregator In Progress

AI automatically classifies, renames and segregates technical records — ADs, SBs, LDNDs, aircraft documents — and uploads them directly to SPARTA. Already live in Document Management workflows.

Records AI

Classification

DM Automation

Gen AI for Records Management Planned

Full AI-driven records review pipeline in SPARTA: BTB review, AD/SB, HT/OCCM, STC, dent & damage, LDND, pre-purchase and redelivery records — cutting turnaround time and improving audit accuracy.

BTB Review

AD/SB

Pre-Purchase

AI-Based Review & Reports Planned

AI generates client-ready reports, specification sheets, utilisation summaries, MR claims reviews and exchange parts analyses directly from SPARTA data — replacing manual preparation with accurate automated output.

Report Generation

MR Claims

Utilisation

USE CASE 05 · ACTIVE

AI for Coding, Prototyping & SPARTA Development

The Digital Team uses AI coding assistants to build and maintain SPARTA — writing, reviewing, and testing code faster while keeping quality high across every sprint.

QA Automation

Rapid Prototyping

- Backend & frontend code generation accelerates SPARTA development — engineers focus on architecture, not boilerplate
- AI-powered QA/QC catches bugs earlier in the cycle, reducing production defects in SPARTA releases
- Rapid prototyping with AI enables quick demos and proof-of-concepts for clients and stakeholders
- AI-generated documentation and test cases improve SPARTA's maintainability and compliance traceability

5+

AI Use Cases

3

Actively In Progress

2

On Roadmap

3

Teams Covered



AI Across Acumen Workflows & Our Direction of Travel

The Digital Team is introducing AI across TAM, Powerplant and Data Management teams — automating complex, high-volume aviation workflows to deliver faster, more accurate outcomes for clients.

AI-Targeted Workflow Coverage Across Teams

Key workflows being automated or augmented with AI — across TAM, Powerplant and Document Management

| TAM | Powerplant | DM |
|--|---|---|
| Technical Asset Mgmt | Engine & Component | Data Management |
| <ul style="list-style-type: none"> Extract key info for client reports AI Compare PDFs/Excels for P/N & S/N AI Classify aircraft images by defect type AI Extract images from inspection videos AI Track project status via Excel | <ul style="list-style-type: none"> Analyze ECM graph + BSI data AI Check AD applicability by LLP config AI Parse LDND list intelligently AI Search BTB docs by keyword AI | <ul style="list-style-type: none"> Records segregation, renaming & SPARTA upload AI Bulk rename files by document content AI BTB review & binder preparation AI AD/SB, HT/OCCM & LDND review AI Checklist creation from Excel list AI |

The above workflows are a representative sample — Acumen's Digital Team has a broader and continuously growing pipeline of AI use cases across all teams.

What AI Delivers for Acumen & Clients

Tangible outcomes from embedding AI across aviation management workflows

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|---|--|---|---|
| <h3>Speed & Efficiency</h3> <p>Automates high-volume tasks — records review, document segregation, report generation — freeing teams for client service and analysis.</p> | <h3>Accuracy & Consistency</h3> <p>Eliminates human error in data extraction, classification and cross-referencing — critical for AD compliance, lease reviews and audit trails.</p> | <h3>Faster Turnarounds</h3> <p>Pre-purchase reviews, redelivery records and BTB packages completed significantly faster — a direct competitive edge in client delivery.</p> | <h3>Scalable Capacity</h3> <p>AI agents scale effort without scaling headcount — enabling Acumen to handle more aircraft, more clients and more complex mandates.</p> |
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ACUMEN'S DIRECTION OF TRAVEL

AI as a Core Capability, Built into SPARTA & Beyond

AI is not a future initiative — it is active today in how Acumen's Digital Team builds SPARTA and serves clients. As use cases mature and new ones emerge, AI will touch every workflow across TAM, Powerplant, DM and beyond. This is Acumen's competitive edge: aviation-specific AI that makes our people faster, our outputs more accurate, and our service unmatched.

- Responsible AI
- Aviation-Specific
- Continuously Evolving
- Client-Centric