



CUSTOMER CASE STUDY
AVIATION • GENERATIVE AI
2026



JETBLUE × THEOM • PRODUCTION GENAI ON REGULATED DATA

One LLM. Millions of users. **Zero policy drift.**

How JetBlue deployed production Generative AI on its data estate with one control layer across data security posture, data access governance, and AI-layer policy enforcement — anchored on Databricks Unity Catalog, Azure AD identity, and the Theom control layer.

CUSTOMER
JETBLUE AIRWAYS

STACK
AZURE • DATABRICKS • UNITY CATALOG

WORKLOAD
BLUEBOT — ENTERPRISE GENAI

SCOPE Unified DSPM • DAG • AI Governance	TIME TO OUTCOMES 90 days Prototype → production service	SERVED VIA BLUEBOT 40M+ Customers across JetBlue's lines of business	ANCHORED IN Azure + UC No re-platforming required
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— THE CHALLENGE

Production GenAI on regulated aviation data.

JetBlue runs one of the most sophisticated data stacks in the airline industry — Azure-centered, with a Databricks lakehouse serving every line of business, from Commercial and Operations Data Science to AI & ML Engineering and Business Intelligence, all reporting directly to the CTO. Adopting Generative AI on top of that estate ran into a problem JetBlue's own data leadership was explicit about:



Data governance is the biggest obstacle to deploying generative AI and machine learning in any organization.

SAI RAVURU • SENIOR MANAGER, DATA SCIENCE & ANALYTICS, JETBLUE — DATABRICKS BLOG, JUNE 2023

That obstacle resolved into three concrete sub-problems:

01 — Data Access

Access at the data layer

Hundreds of thousands of users, policies, and data objects. No way to manually govern who an LLM-backed application could retrieve documents for on a user's behalf.

02 — Compliance

Regulatory load

Aviation data carries Federal Air Regulations and other obligations. Closely monitored role-based access is the floor — not the ceiling. GenAI multiplies the surface area where those rules must be enforced.

03 — Economics

Multi-model economics

Training a separate model per business function would have been operationally untenable. JetBlue needed one model serving every role, with retrieval filtered by who the requester is.

THE SOLUTION

One control layer across DSPM, DAG, and AI governance.

JetBlue deployed Theom as the control layer for its data estate. The differentiator isn't any single capability — it's that data security posture, runtime data access governance, and AI-layer governance operate from one policy model. Most enterprise stacks wire these together from three different vendors. JetBlue runs all three on Theom.

DSPM

Data Security Posture

Continuous discovery, classification, and lineage across the lakehouse. Surfaces sensitive joins, orphaned data, catalog drift, and toxic combinations before they reach a RAG pipeline.

DAG

Data Access Governance

Real-time, identity-aware enforcement at the point of access. The same role and attribute model that governs human queries also governs what a RAG pipeline can retrieve on a user's behalf.

AI GOV

AI Security & Governance

Agentic observability over BlueBot's full trace context. Detects prompt injection, hallucination drift, agents bypassing guard rails, and Shadow AI — the runtime risks that DSPM and DAG alone don't see.

THEOM FOUNDATION • 5 QUESTIONS, ENFORCED CONTINUOUSLY

WHAT

What data exists, and is it sensitive?

WHERE

Where does it flow? Topology and lineage.

WHO

Who has access — and do they need it?

WHEN

When was it accessed, by whom, from where?

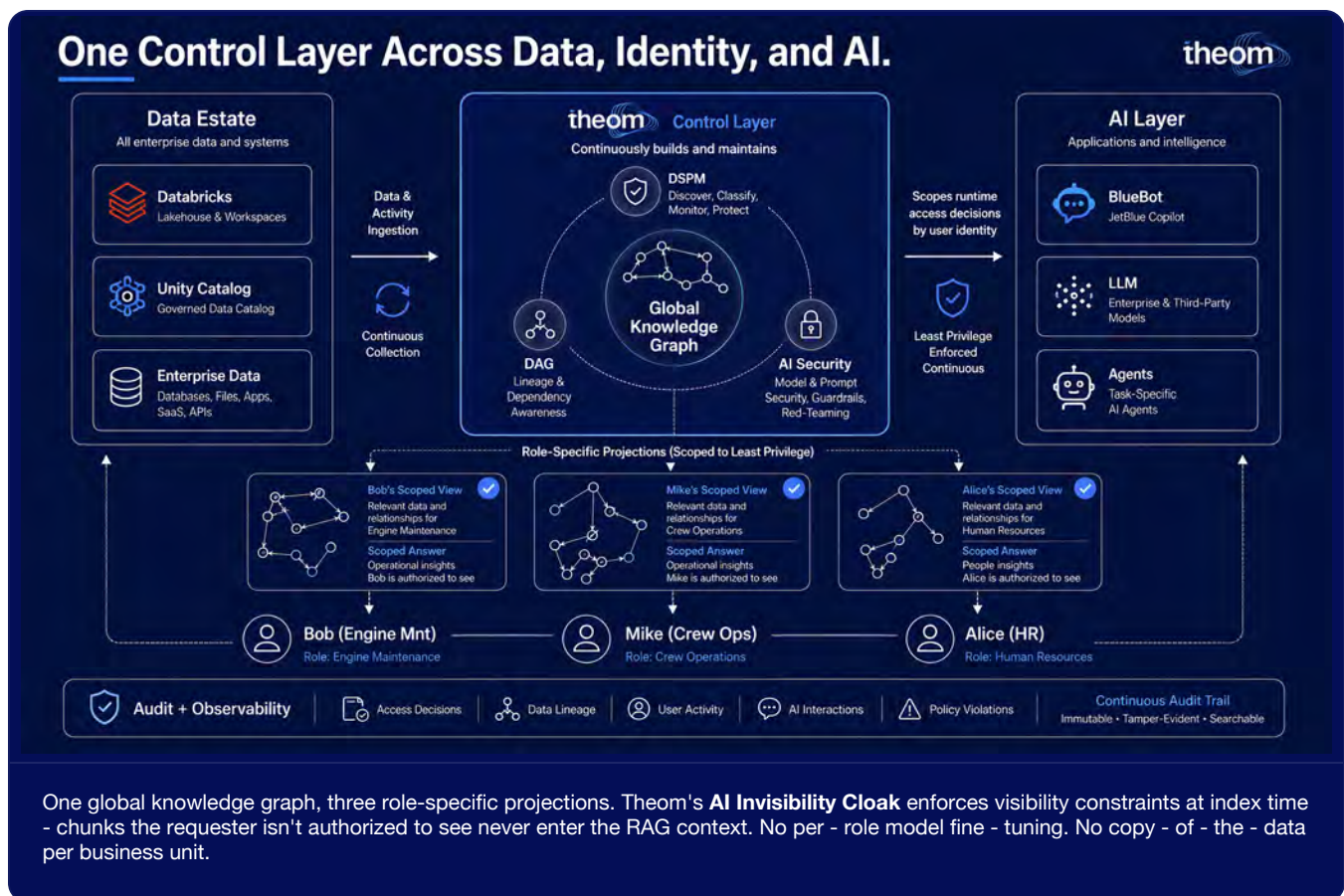
WHY

What is the purpose of the access request?

USE CASE SPOTLIGHT • BLUEBOT

One LLM, role-aware retrieval, every business function.

BlueBot is JetBlue's enterprise GenAI assistant on a hybrid RAG architecture — Azure OpenAI embeddings, Databricks Dolly 2.0, Unity Catalog ACLs, Entra ID SSO. Theom adds the control layer: one global knowledge graph, continuously projected into role-scoped views at retrieval time. Bob, Mike, and Alice all hit the same model and the same pipeline — and each receives only what their identity authorizes.



OUTCOMES

What JetBlue got in the first 90 days.

JetBlue's integration of Databricks Unity Catalog and Theom's access governance platform marks a significant advancement in aviation technology, specifically in deploying generative AI. The combination of Unity Catalog and Theom fortifies data security, ensuring compliance and data integrity, making JetBlue a model for AI application in aviation.

DATABRICKS • DATA + AI USE CASES BLOG, AUGUST 2024

OUTCOME	WHAT IT MEANS IN PRACTICE
01 GenAI shipped to production	BlueBot moved from prototype to enterprise service on production data — not a sanitized copy.
02 One model, many roles	Finance, operations, crew, and customer service share a single LLM and pipeline. Theom enforces what each role can retrieve — no per-team model fine-tuning required.
03 50+ data-layer findings in 90 days	Surfaced and remediated issues including service-account impersonation, over-permissioned analytics access, sensitive-join policy violations, and unauthorized cross-environment data movement.
04 Continuous access recertification	Replaces manual, point-in-time access reviews with continuous evaluation across the data estate — a material reduction in audit preparation effort.
05 No identity-based data exposure	No identity-based or policy-violation data exposure incidents detected in BlueBot production since Theom deployment.
06 One control layer over the existing stack	Theom operates over the Azure + Databricks lakehouse without forcing a re-platforming. Unity Catalog ACLs, Azure AD identity, and the Dolly + Azure OpenAI retrieval path stay where they are; Theom adds posture, governance, and AI-layer enforcement on top.

FORWARD-LOOKING

Built for the regulatory wave that's already arriving.

Aviation runs on regulated data. Adding GenAI on top doesn't relax those obligations — it multiplies the surface area where they must be enforced. JetBlue's Theom deployment positions the data estate for the binding regimes already in motion.

EU AI Act

2 AUG 2026

Regulation 2024/1689. High-risk AI system obligations become enforceable, with penalties up to €35M or 7% of global turnover. Documentation, risk management, human oversight, and data governance are required of providers and deployers.

NIST AI RMF 1.0

US BASELINE

The de facto US baseline cited in federal procurement guidance and emerging state laws. Maps cleanly onto Theom's WHAT / WHERE / WHO / WHEN / WHY model.

TSA Security Directives

SD 1582 / 1584

Aviation-sector cyber series. Explicit access control, segmentation, and monitoring obligations on the data systems that feed operational technology.

State-level AI laws

CO • CA • NY • TX

A moving target stacking across multiple jurisdictions. Rewards organizations whose controls are policy-driven rather than hard-coded.

One consistent policy model. One evidence trail. Built for what's next.

Theom's role across these regimes is the same: keep human and AI access to data governed by one consistent policy model, with the evidence trail auditors need. JetBlue's deployment is the reference architecture — and the playbook is portable to any regulated industry running on a modern lakehouse.

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