Astris AI

A Lockheed Martin company

Beyond Pilots:
Integrating GenAI for Real-World Enterprise Results

Astris AI
A Lockheed Martin Company

Proven in Defense.
Optimized for Business.

Speaker Intro

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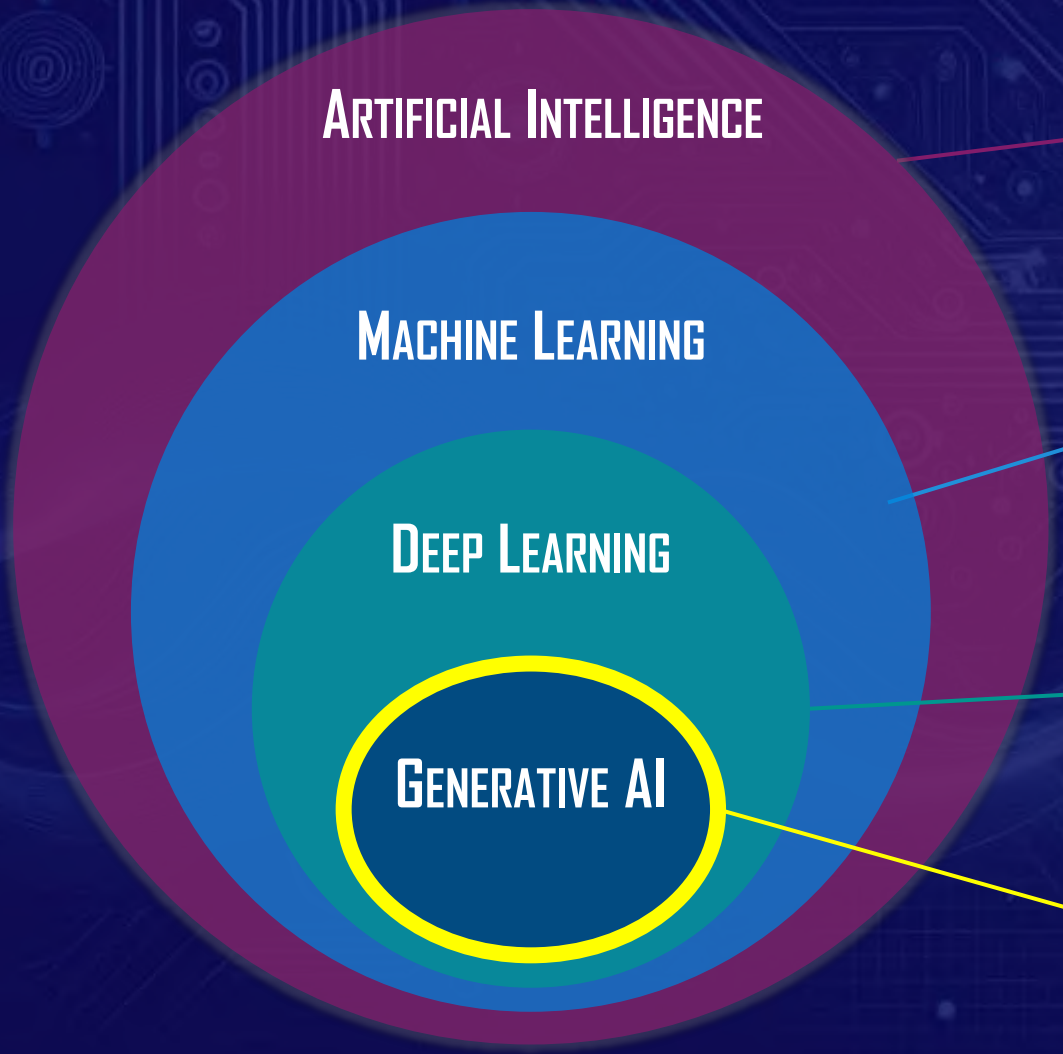
Astris AI, a Lockheed Martin company

GenAI is only a piece of a larger capability



Any technique which enables computers to mimic human behavior

"The ability of machines to perform tasks that normally require human intelligence - for example, recognizing patterns, learning from experience, drawing conclusions, making predictions, or taking action - whether digitally or as the smart software behind autonomous physical systems" – **US DoD AI Strategy**

AI techniques that rely on algorithms designed to learn without being explicitly programmed

Examples: Amazon shopping recommendations, email spam filter

ML techniques that use layers of a neural network to process massive amounts of data

Examples: Image Recognition, Self Driving Cars

AI techniques capable of **generating** text, images, or other media

Examples: Text LLMs (ChatGPT), Imagery (DALL-E), Audio (MusicGen)

Lockheed Martin’s Enterprise AI Program

122,000
Employees

65,000
Engineers, Scientists and Technologists

350+
Facilities Worldwide

Operating in **33** Countries with **6,300** International Employees

50k+ GenAI Users

2.5K AI Assistants
created in Q1 2025

Supporting **12k+**
AI Engineers & ML Developers

Processing
6+ billion tokens / week

30+ classified environments on-prem and private cloud

Lockheed Martin's AI Strategy

AI Assistants Across Lockheed Martin

Finance AI Assistants at Lockheed Martin

Transforming Finance Across Reporting, Compliance, Tax, and Forecasting

Company Insights Assistant

- **Challenge:** Time-consuming earnings research, create an executive summary about peer companies
- **Solution:** Summarizes key financial outcomes, earnings calls, market sentiment, and business trends to support faster reporting and executive briefings
- **Impact:** Reduces manual effort from **4 hours to 1 hour** per report, accelerating decision-making

Incentive & Credit Assistant

- **Challenge:** Identify tax credits based on program details and expenditures
- **Solution:** Evaluates spend against regulatory guidelines and financial frameworks to identify eligible tax credits, incentives, or grants—ensuring audit-ready compliance
- **Impact:** Achieves **3.5x faster** processing while maximizing claimable value and reducing compliance risk

Lockheed Supply Chain Success Stories

Parts Classification

Challenge

- Classifying parts in a Bill of Materials is a manual and time-consuming process
- Manual classification prevents:
  - Development of effective category strategies
  - Aggregation of demand
  - Management of obsolescence

Solution

- Users upload a list of parts through a simple interface
- AI Factory classifies parts using machine learning models
- Categories are standardized across the organization to enable better analytics

Estimated Impact

- 80% reduction in time spent on manual classification
- Increased consistency and accuracy in part categorization
- Faster development of category strategies and sourcing initiatives

Contract Review Assistant

Negotiation Assistant

Foreign Object Detection Success Story

The Problem

- Foreign objects like stray bolts or debris in manufacturing lines cause:
- Safety & compliance risks
- Costly delays or shutdowns
- Failed audits or rework cycles

Traditional inspection is:

- Inconsistent and hard to scale
- Limited by human access
- Bottlenecked by scarce labeled data

Our Solution

Generate Synthetic Data for Training

- Auto-generates labeled images by overlaying debris onto clean photos
- Enables rapid model development without relying on rare real-world examples

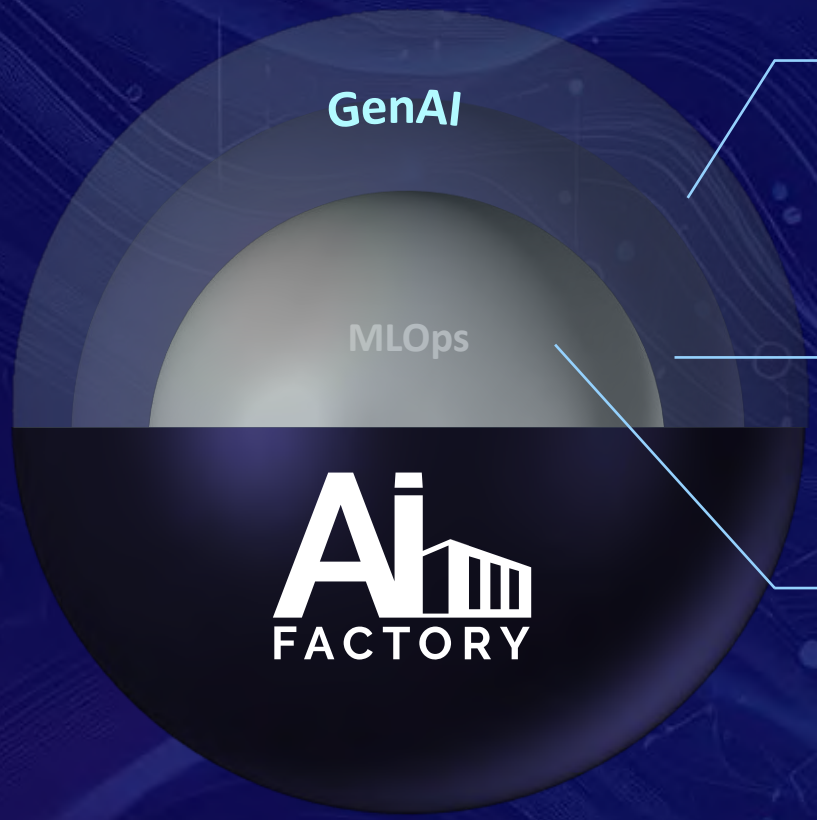
Edge AI for Real-Time Detection

- Deployed models on cameras and robotic arms
- Detects FOD live in hard-to-reach or dynamic environments

The Impact

- Higher Defect Detection Rates
- Expanded Inspection Coverage
- Faster Model Training Cycles
- Reduced Downtime & Rework
- Improved Safety & Compliance
- Lower Inspection Costs at Scale

We built our AI Factory to securely scale AI



GenAI

Navigator

AI Assistants - ALL Users

Genesis

GenAI Platform - Admins and Super Users

MLOps

Panel

MLOps Platform - AI/ML Devs, Engineers, Data Scientists

How did we get here?

Do we have clear data ownership, security controls, and quality access so GenAI work can start without risk?

Are our leaders and teams equipped—skills, policies, incentives—to embrace GenAI pilots without cultural or policy roadblocks?

How do we move from pilots to true enterprise-wide AI at scale and build an AI operating model?

Data Readiness Framework

Availability	Access & Permissions	Completeness	Structure
Quality	Volume	Alignment to Use Case	Update Frequency

Data Readiness

How it Started

- Early projects often lacked sufficient data quality assessment
- Ideas prioritized without full understanding of data conditions

How it Evolved

- Data readiness became a prerequisite for approval
- Joint working sessions evaluated completeness and structure
- Teams incentivized to improve data quality in exchange for AI support

Key Lessons Learned

- AI success is gated by data quality
- Reframing proper data hygiene and governance as an enabler drove engagement
- Offering value in exchange for clean data proved more effective than enforcement

Enterprise-wide Adoption Flywheel

Driving Adoption & Change

How it Started

- Initial focus was on usage metrics: logins, tokens, activity volume
- No user-level tracking to foster psychological safety
- Adoption started through word-of-mouth and internal evangelism

How it Evolved

- Leaders demonstrated use cases in performance reviews and planning
- Workshops and hackathons enabled rapid co-creation of tools
- Increased demand for visibility into value and impact by function

Key Lessons Learned

- Trust and relevance drive grassroots adoption
- Leadership modeling is more effective than mandates, find a compelling use case to start adoption
- Scalable use requires structured enablement and ongoing measurement

Key Governance Components

People	Operating Model	Change Management	Architecture	Technology
• Clearly defined roles (e.g., Business Scenario Owner, AI Champion, Data Owner, Solution Architect) • Accountability across the AI lifecycle • Role-based onboarding and upskilling • Escalation and issue management responsibilities	• Use case intake and evaluation processes • Enablement and deployment playbooks • Lifecycle support and measurement of business value • Handoff plans, sunsetting, and sustainment expectations	• RACI models and governance workflows • Change champions embedded in functions • Cross-functional coordination for rollout and scaling • Communication and adoption strategies	• Secure, scalable private cloud/on-prem environments • Monitoring, drift detection, and observability • Support tiers and escalation paths • Compliance with SLAs and performance standards	• AI assistants, interfaces, and integration points • Model versioning, rollback, and update governance • Prompt scaffolding, safety filters, and access control • Enterprise system interoperability (ERP, CRM, etc.)

Governance

How it Started

- Began as grassroots pilots testing AI's potential across departments
- Ideas were sourced broadly with informal prioritization
- Focus was on proving capability, not long-term ownership

How it Evolved

- Structured governance model introduced for responsible scaling
- Projects evaluated on business value and technical feasibility
- Formal RACI model developed with shared functional ownership
- New roles identified, bridging AI and business process expertise

Key Lessons Learned

- Clear governance enables scalable impact
- Accountability must be built early, even if formal structure comes later
- Strategic alignment is essential for moving from pilot to production
- Resource investment is critical from business areas
- Federated model works best

Key Takeaways

Data is the Gatekeeper

No AI use case moves forward without accessible, clean, and usable data. Readiness must come first.

Adoption Is a Behavior Shift

It’s not just about using a tool — it’s about changing how people work, think, and collaborate.

Scale Requires Structure

Governance, ownership, and operating models turn experiments into sustainable transformation.

Change Requires a System

Long-term success needs leadership modeling, embedded learning, social proof, and feedback loops.

Make It Measurable, Make It Real

Track outcomes, not activity. Value shows up in time saved, quality improved, and evolving roles.

Call to Action

SCAN ME

- Scan the QR code to download our AI intake assessment form for you to get started on your journey
- Download the presentation, templates, and contact info to discuss

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Thank You