



From Idea to Production in 30 Days

**Build enterprise-grade AI applications
entirely on Databricks**

Backed by real use cases from Fortune 500 FSI and healthcare projects that solved the last-mile problem in under a month.

Table of Contents

1	CHALLENGE Data is ready. AI is ready. Apps aren't in production.	3
2	SOLUTION Combined approach to cut time to production.	4
3	SUCCESS STORY 1 Production-ready AI app in 30 days.	5
4	SUCCESS STORY 2 Secure healthcare AI application in 4 weeks.	7
5	OUTCOME One platform. The right expertise. AI app ready for production.	10
6	FAQ Yes, but... ..	11
7	TEAM Meet the team behind the results.	12

CHALLENGE

Data is ready. AI is ready. Apps aren't in production.

Your organization is doubling down on AI initiatives. You've built a solid data foundation, hired brilliant engineers, and integrated powerful models to generate business-critical AI insights. But without a usable interface, these insights get stuck in notebooks and pipelines, invisible to the business users who need them most.

Moving an AI application to production at an enterprise scale is not something you can do overnight.

- App rollouts get dragged by infra setup, approvals, and integrations
- Siloed teams work with different stacks and speak different languages
- Security/governance and DevOps implementations slow down the release

Meanwhile, your competitor is gaining ground while your AI projects collect dust.

- Your organization fails to capture market share
- Teams burn out watching their AI never see the light of day, much less deliver ROI
- Board and stakeholders lose faith in AI initiatives (and rethink budgets)

What if you could close the gap between your AI engine and business users in 30 days, all while staying on one platform – no migrations, no technical debt?

SOLUTION

Combined approach to cut time to production

One platform for data, AI, and software—governed, secure, and fully interoperable. If you work on Databricks, you're already there. Databricks Apps is the final piece, bringing applications to where your data and AI live.

We've worked with Databricks Apps long before GA, exploring both strengths and limits, and saw what it can do. It helped us meet impossible deadlines. Now we're sharing it with you to help you meet yours.

How Databricks Apps makes it a reality

Speeds up delivery



All the things you would normally spend weeks setting up are either built-in or can be configured in clicks. This alone saves you tons of development time and guarantees stable, reliable deployment.

Connects tech and business



Databricks unifies data, AI, and software development. All your teams work under one roof—no integration layers, new stacks, or overhead. And your business users get polished, branded AI applications with custom UX perfectly fit into their nuanced workflows.

Coupled with the right expertise, Databricks Apps helps you go from idea to enterprise-ready AI application in weeks, not months.

Databricks Apps

for fast, easy, production-ready development

- Serverless hosting, no additional infrastructure
- Built-in governance, security, and auth
- One-click deployment, integrated DevOps
- Full power of Databricks ecosystem for data+AI+apps

Hiflylabs

for field-tested, reliable, enterprise-scale delivery

- Exclusive first-mover experience with Databricks Apps
- Reusable boilerplates and workarounds for platform limitations
- Stress-tested scalability framework
- Direct line to Databricks Apps team

But don't just take our word for it. See it in action.



SUCCESS STORY

Fortune 500 story: Production-ready AI app in 30 days

HERO: A global FSI company that runs millions of transactions daily.

GOAL: Deliver risk assessment insights instantly on a secure B2E application with custom UI, AI chat, and automated reports.

TIMELINE: 1 month

APPROACH: Hiflylabs team combined the power of Databricks Apps with a proprietary AI product roadmap and stress-tested scaling framework to deliver a secure enterprise application with rich AI features in just one month.

RESULT:

- 30 days to production
- 1 month to positive ROI
- 99% analytics time and cost reduction

30 days later: AI application in production, last-mile problem solved



BEFORE:

- Analysis process: 2 weeks of manual work
- Cost per analysis: \$20,000 in resource time
- Challenge: Last-mile gap between AI insights and business users



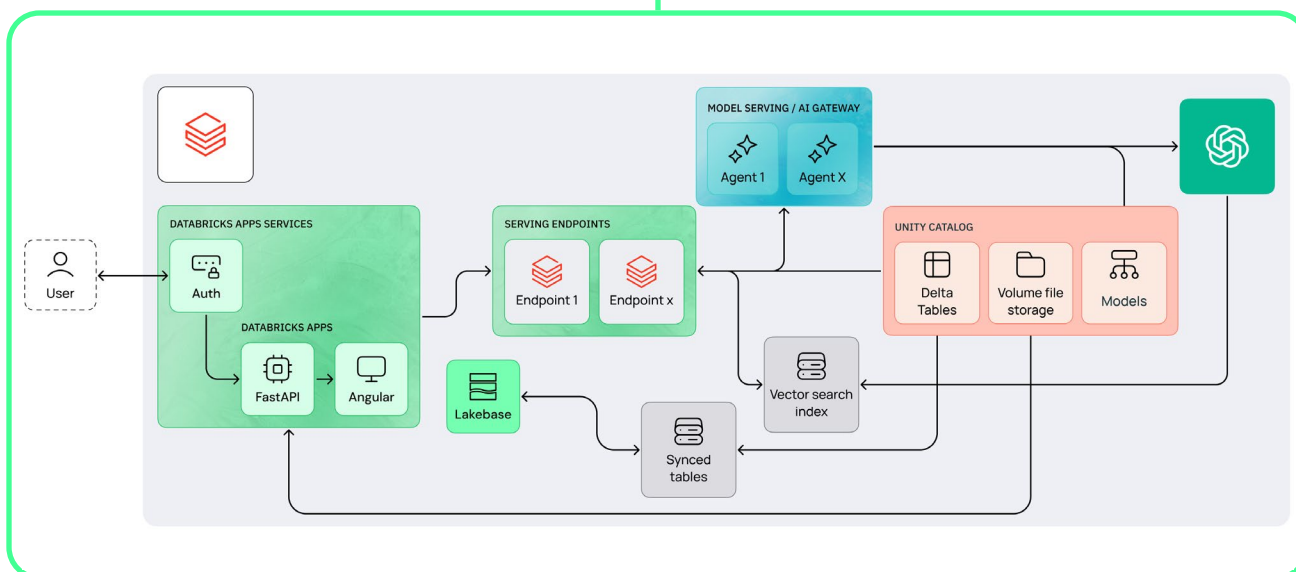
AFTER:

- Analysis process: 20 minutes to automated insights
- Cost per analysis: \$50 in compute costs
- Solution: Instant access to AI insights and quick ROI from AI initiatives

[See what made the 30-day deadline possible.](#)



One-platform architecture utilizing the power of Databricks Data Intelligence Platform



What made the 30-day deadline possible

ONE-PLATFORM ARCHITECTURE

With Databricks Apps, we built everything within one ecosystem, saving weeks on boilerplate and infrastructure work. No integration complexity, no overhead.

NATIVE AI INTEGRATIONS & TOOLS

We used familiar frameworks and native AI tools like AI Gateway, MLflow model serving, and vector search to build custom user workflows and rich AI features directly plugged into Databricks data.

BUILT-IN AUTHENTICATION, GOVERNANCE & SECURITY

Out-of-the-box governance, auth, and security guardrails cut months of custom development and approval cycles, making the application compliant and enterprise-ready.

ONE-CLICK CI/CD SET-UP

Using Databricks Asset Bundles and Databricks CLI, we set up infrastructure with IaC and ship with CI/CD within seconds.

UNIQUE SCALING FRAMEWORK

We used a proprietary multi-layer scaling strategy that combines native Databricks services with robust testing to guarantee enterprise performance without migrations and rebuilds.

- Instance multiplication with a minimal 30ms latency for cross-app scaling
- Unlimited low-latency serving endpoints that scale automatically
- Jobs running on powerful clusters for heavy computation with 10-15 second latency

SUCCESS STORY

Impact story: Secure healthcare AI application in 4 weeks

CHALLENGE: Fragmented data systems, low trust in AI, and governance gaps prevent healthcare from adopting AI that could save doctors hours of manual work daily.

GOAL: Equip doctors with powerful, trustworthy AI tools to access patient insights from multisource, multiformat medical data in one secure, centralized space.

APPROACH: Hiflylabs harnesses the full power of the Databricks platform for every component of the application to enable reliable data flow, air-tight security, and fast time to production.

RESULT: Secure, audit-ready healthcare application with explainable AI and governed data built in 4 weeks.

4 weeks later: AI application with explainable AI, governed data, and regulatory compliance



BEFORE:

- Patient data scattered across systems without unified governance
- Low AI trust and inadequate guardrails block AI initiatives in healthcare
- Hours of doctor time wasted on manual admin and fragmented data access



AFTER:

- Governed, secure environment for multisource, multiformat medical data flow
- Trustworthy AI tools for patient data summarization, risk assessment, RAG, and decision support
- Hours of admin work automated, giving doctors time back for patient care

See what's under the hood.



360 patient view with GenAI summarization, risk prediction, and RAG to query medical data

The screenshot displays a patient dashboard for John S. Doe, 40 years old, male, 93 kg. The interface includes an AI chat on the left with a prompt "Hi, how can I help you?" and buttons for "Recommended treatments" and "Risk factors". The main content area is divided into several sections:

- Medications:** Penicillin (2 m ago), IV contrast Dye (8 y ago), and Vitamin D3 (2000 IU recommended daily).
- Lifestyle:** Visual impairment (2 m ago), Physical therapy (8 y ago), and Smoking (8 y ago).
- Chronic diseases:** A summary based on medical records indicating a history of haemangioma hepatis (liver hemangioma) and hypercholesterolemia (liver hemangioma) and hypercholesterolemia, which were noted as previous illnesses in 2021.
- General status:** A summary stating the patient's general condition is stable, with regular internal medicine and laboratory tests. The main constant abnormalities are high cholesterol levels, a hemangioma in the liver, and dilatation of the right (and to a lesser extent the left) renal pelvis.
- Risk indicators:** Cardiovascular concern (EKG showing incomplete right bundle branch block), Family history of hypertension noted, and Other abnormal lab values (Elevated monocyte count, Low GFR (glomerular filtration rate) value noted, Positive nitrite test result in urinalysis).
- Next steps:** Endocrinology consultation (Checks for TSH, T3, T4, and Anti-TPO; thyroid ultrasound also preferred), Diet (Balanced diet rich in vegetables, lean proteins, and whole grains; Avoid processed foods, excess salt, and alcohol), and Lifestyle changes (≥150 min/week moderate exercise; Consistent sleep schedule).
- Laboratory insights:** High cholesterol and LDL, eGFR 85 (slightly decreased), kidney function and liver enzymes normal, urine completely negative. Specific values include Cholesterol (5.05 mmol/L), LDL cholesterol (2.62 mmol/L), eGFR (85 mL/min/1.73 m²), Triglycerides (2.73 mmol/L), and HDL cholesterol (1.19 mmol/L).
- Diagnostic examinations:** Liver ultrasound.
- Documents:** A section for uploading files, with supported types: PDF, txt, .xls, .xlsx, .jpg, .jpeg, .png, .doc, .docx. It lists several "Lab_result.pdf" files from 04/04/2025.

The screenshot displays a Databricks Apps dashboard with the following components:

- Asset Bundles:** 1-click deployment.
- AI chat:** A sidebar with "Agentic RAG with intent classification", "Vector search index", and "Caching layer with Lakebase".
- Master data:**
 - Medications:** A section for managing medication data.
 - Lifestyle:** A section for managing lifestyle data.
 - Lakebase (Postgres):** Key-value lookup.
- General status:**
 - Real time LLM endpoint:** For content generation.
 - Risk indicators:** A section for managing risk indicators.
 - Next steps:** A section for managing next steps.
 - Model Serving:** Custom predictive models & agents hosted.
- Laboratory insights:**
 - DBSQL Warehouse & AgentBricks:** Information extraction.
 - Diagnostic examinations:** A section for managing diagnostic examinations.
 - Lakebase & Vector Search Index:** Hybrid search.
- Documents:**
 - LakeflowJobs & Agent Bricks for ingestion:** A section for managing document ingestion.
 - Unity Catalog for data governance:** A section for managing data governance.
 - Unity Catalog Volumes for files:** A section for managing file volumes.

See what's under the hood.



Building blocks of a data+AI application

APPLICATION: Databricks Apps as a unified environment to build, deploy, and manage data, AI, and analytics applications in Databricks Lakehouse.

SECURITY: Built-in authentication, OAuth, SSO, and service principals for granular access controls, A2A communication, and audit logging to support compliance (HIPAA, GDPR, SOC 2, etc.)

GOVERNANCE: Unity Catalog integration for comprehensive data governance, isolation, privacy, lineage, quality control, and monitoring.

DEPLOYMENT: Production-ready CI/CD with IaC and Asset Bundles seamlessly integrated with GitHub Actions, including built-in monitoring and observability.

AGENTIC RAG: Agentic RAG with intent classification and caching layer (Lakebase) for faster, more accurate retrieval. Supports citations and explainable AI guardrails for validation and compliance.

GENAI: Real-time LLM endpoints for content generation.

DATABASE: Lakebase to store and retrieve transactional, analytic, and key-value data with low latency and high concurrency.

PREDICTIVE MODELS: Model Serving to host custom predictive models/agents for risk assessment, red-flag detection, and insight generation.

EXTRACT, TRANSFORM, LOAD: Agent Bricks for information extraction, Lakeflow Jobs for document handling, ingestion, and heavy compute tasks.

SEARCH: Vector Search Index with hybrid search capabilities and Lakebase for multiformat search and data querying.

OUTCOME

One platform. The right expertise. AI app ready for production.

Hiflylabs expertise+Databricks all-in-one platform removes the roadblocks that otherwise delay time to production for months:

Infrastructure headaches → **UNIFIED FULLY-MANAGED INFRASTRUCTURE**

No multi-cloud complexity, hosting coordination, and licensing overhead—enterprise performance without the need to migrate or rebuild.

Endless approval cycles → **ENTERPRISE-READY FROM DAY ONE**

Unity Catalog governance, OAuth/SSO authentication, native security framework, and compliance audits.

Team and integration gaps → **INTEGRATED DATA, AI, AND APPLICATIONS**

Cross-functional collaboration replaces translation layers, hand-offs, and the gap between tech capabilities and business needs.

Slow release cycles → **4 WEEKS TO PRODUCTION**

All things built-in, one-click deployment, and zero infrastructure overhead cut development time and shift focus to business functionality.

“Black box” systems → **TRANSPARENT, GOVERNED AI**

A unified governance model for all data and AI enables clear audit trails, automated guardrails, and fine-grained access controls. Every AI action is compliant, explainable, transparent, and secure.

FAQ

Yes, but...

AI Implementation

...what about AI hallucinations?

A context-aware AI is anchored in fact, and you will significantly mitigate hallucinations by grounding models in your verifiable enterprise data. Add on top: Multi-agent systems, where agentic validation steps allow models to cross-reference each other's work. Still, keep humans in the loop for mission-critical processes.

...can AI agents learn and update their knowledge?

Most GenAI systems don't retain feedback, adapt to context, or improve over time, which is a core scaling barrier. Solution: robust AI ontologies (or even simpler knowledge tables) where agents dynamically update workflow state information. This keeps agents consistent, helps handle partial failures, and enables graceful recovery.

Databricks Platform

...can it scale to our enterprise workload?

Databricks is designed for enterprise apps that run on large and complex datasets. With a well-planned architecture and scalability strategy, you get optimal performance and effective resource sharing.

...can I rely on built-in security and governance?

Databricks has been certified to the highest compliance standards through independent audits. Unity Catalog provides built-in governance from the ground up. Everything on Databricks is governed and access-controlled through Unity Catalog by design.

...can it integrate into our environment?

Databricks is natively multi-cloud: it can run on Azure, AWS, and GCP. It accesses data across hyperscalers without moving it, either via Delta Share or Lakehouse Federation. It co-exists cleanly with each cloud's native services: building on blob storage, using platform identity management, and enabling mix-and-match orchestration between Lakeflow Jobs and platform tools.

...what if we need to migrate after all?

We asked the same question. The Databricks SDK is well-designed for these scenarios and provides strategies for low-risk migration. You are not locked in and can move at any time without incurring technical debt.

TEAM

Meet the team behind the results



Just as Databricks unifies data, AI, and apps on one platform, Hiflylabs helps enterprises integrate data, AI, and business applications into well-oiled, high-performing workflows.

First-mover experience with Databricks Apps

Building production applications since the preview phase

Member of Databricks Product Advisory Board with 2 in-house MVPs

Working directly with the Databricks product team

Battle-tested blueprints and scaling methodologies

Proven in Fortune 500 production environments

Developers of the largest AI application on Databricks Apps

Currently running in production at enterprise scale

Featured at Databricks Data+AI Summit 2025

Showcasing 30-day-to-production roadmap live on stage

Databricks trusts Hiflylabs as the #1 partner for building on Databricks Apps



Want to speed up the time to production?



Member of the Product Advisory Board

Talk to Domi and the Hifly team

The earliest adopters of Databricks Apps, moving AI from pilots to production while you're reading this.

- Have any questions about the practical implementation, blueprints, limitations, and lessons learned? Ask us anything!
- Share your own story—we want to learn from your experience.
- Get your own roadmap to build a production-ready AI application in your Databricks stack.



TALK TO DOMI & THE HIFLY TEAM

 **hiflylabs**