DataRobot



Venky Veeraraghavan Chief Product Officer

25+ years of experience building data and AI systems for some of the largest and most complex organizations in the world

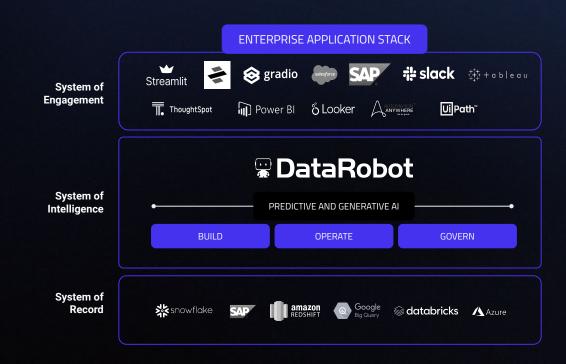
What is DataRobot

A **unified** system of intelligence for every Al initiative

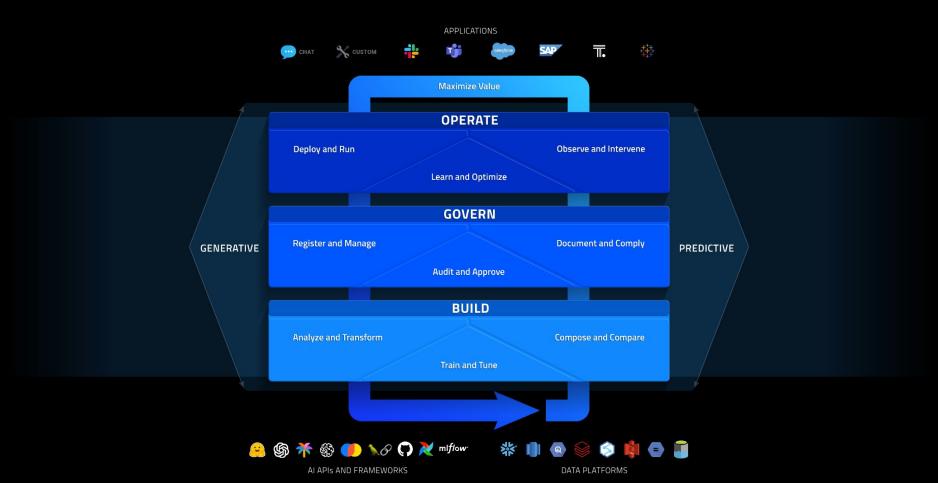
End-to-end: One unified platform to build, govern, and operate predictive and generative Al

Optionality: The most open ecosystem giving you the freedom to adapt as needs evolve

Flexibility: Create and deliver a wide range of Al applications and Al-powered solutions



DataRobot AI Platform



Last year was the **show me** year of Gen Al

This year is going to be the prove it year

The UK is leading the way in Europe, and on a global stage

#3

3rd largest market globally, behind US and China

31%

Increase in AI adoption between 2022 and 2023

39%

Businesses have incorporated Al into daily operations

Source: UK Government statistics

Generative Al Perception and Reality Gap

Perception

"It's all about the model"

- Fixated on fine-tuning
- Lack moderation & safety
- Overlook maintainability
- Struggle to trust results

Reality

Value depends on the end-to-end generative strategy

- Vector DB quality is critical
- Prompting strategy is critical
- Monitoring/Moderation is critical
- Maintenance and governance is critical

Key Barriers to Value with GenAl

Skills Gap

Ecosystem

Governance

Key Barriers to Value with GenAl

Skills Gap

Picking the right use-case

How to effectively build quality use-case

Start low risk, low complexity then move up

Business communications, report generation, and ghostwriting

Knowledge base Q/A, summarization, and research

Administrative data entry assist

Personalization, recommendation, and content generation Customer inquiry routing and response generation

Copilot assistants for enhanced user experience

GENERATIVE AI USE-CASE COMPLEXITY

Low Complexity

- Internal users only
- Basic prompting and pipelines
- Simple app integrations
- Human in the loop
- High-latency

High Complexity

- Public facing
- Advanced prompt chains and pipelines
- Complex applications integrations
- Automated monitoring and safety
- Low Latency

Building high quality GenAl is hard



Data Storage

- Documents & Data Cleansing
- VectorDB
- Embedding model
- Chunk size
- Filtering & metadata



Retrieval

- Retrieval technique
- Number of documents to retrieve
- Relevance threshold
- Add nearby documents
- Multiple QA
- HyDE (and its inverse)



Model

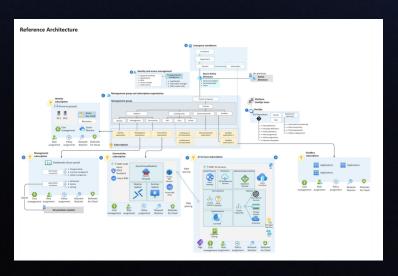
- LLM
- Temperature
- System Prompt
- Chat History

Hyperscalers aren't making it any easier

17 Different Tools

https://docs.aws.amazon.com/architecture-diagrams/latest/powering-multiple-contact-centers-with-gen-ai-using-amazon-bedrock/powering-multiple-contact-centers-with-gen-ai-using-amazon-bedrock.html

14 Different Tools



https://techcommunity.microsoft.com/t5/azure-architecture-blog/azure-openai-landin g-zone-reference-architecture/ba-p/3882102

However, we are still facing barriers



There is no sure bet today or in the future



Although hyperscale, cloud, integrated infrastructure as a service and platform as a service (laaS+PaaS) providers offer a range of GenAl capabilities, it's too early to predict which will emerge as market leaders in any of the capabilities categories."



Future Proof your Stack to Integrate with any AI task



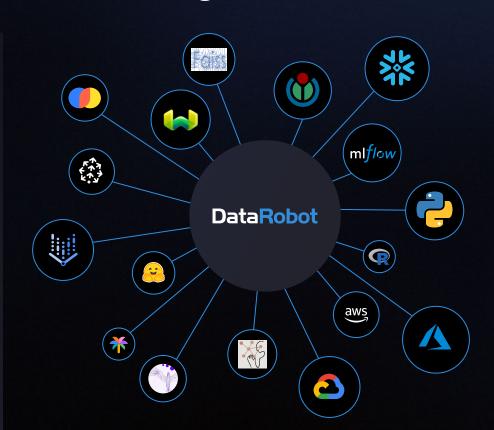
Generative Al

Integrate generative tools including vector DBs, LLM APIs, monitoring tools & comparison playgrounds into a single system.



Predictive AI

Code-first & no-code ML tools, for classification, regression, time series, anomaly detection, geospatial & vision along with experiment tracking, governance & monitoring.

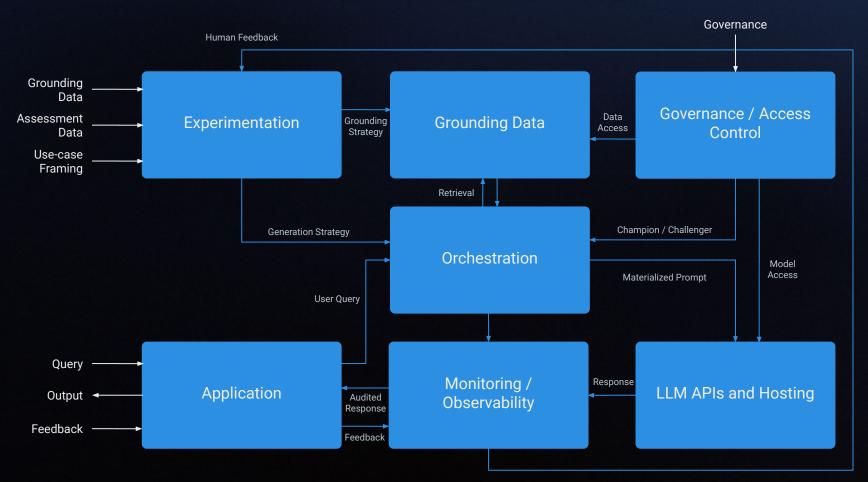




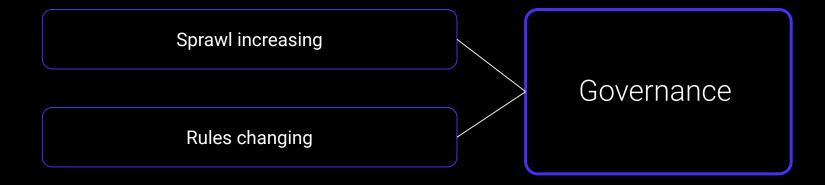
The generative AI space is changing so fast but the flexibility, speed, and interoperability of DataRobot is helping us stay on the cutting edge."

Rosalia Tungaraza, AVP of AI, Baptist Health South Florida

Let's Peek Under the Hood



However, we are still facing barriers



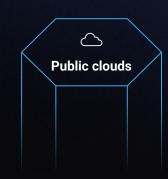
Al sprawl is accelerating & silos are increasing











142+

Open-source LLMs

335

New startups developing GenAl applications 17

Hosted Vector DB options

254

Average number of software applications within an enterprise

80%

Of organizations use multiple cloud providers

Proper Governance Requires Multiple Lines of Defense



Rules-Based Models

Human-centric design to identify sensitive use cases.

Predictive Models

Robust, performance, efficient & auditable implementation.

Generative Models

Tools for data evaluations & model behavior to confirm model integrity.

Deploying and managing in production

Monitor and Govern

Tabular and Unstructured Data

Ingest, Preparation,
Pipeline

Vector Database

Embedding Models, Vector Databases

Generative Models

Prompting Strategies

Predictive Models

Modeling Blueprints

Production

Deployment, Governance GenAl and Predictive Al Consumption

Steps to overcome Key Barriers to Value with GenAl

Skills Gap

Ecosystem

Governance

- Build skills for the right use-cases
- Start with low risk
- Eliminate uncertainty when building
- Learn through iteration

- Maintain control with optionality
- Modernize your Ai Infrastructure
- Bring in best of breed tools

- Track all Al artifacts and actions
- Focus on robust monitoring
- Measure quality w/ assessment metrics
- Test and Document everything

Fueling real-world value

Freddie Mac

Doubling data science productivity

2-10x2.7x

Productivity Faster POV

1700+

Hours saved in model development time

FORD**DIRECT**

Improving sales and service with Al-powered insights

\$3M 18x

Uplift in lead In reduced tech debt buying propensity

75%

Faster to get to implementation

"The value of having a single platform that pulls all the components together can't be underestimated. Then there's the combination of the technology and the collaborative DataRobot team. If either one of those wasn't there, I would have looked elsewhere."

Craig Civil

Director of Data Science & Al

Visit the DataRobot Booth to get started

Book a 1:1 strategy session

Let's review your organisation's challenges and unlock business value with generative Al together.

Generative AI Catalyst Program

Get to value quickly and accelerate delivery of your generative AI use cases by leveraging our world-class generative AI platform, deep AI expertise, and knowledge from hundreds of DataRobot customers. Speak to our team to learn more.

Start a free trial

Try DataRobot yourself at: datarobot.com/trial

Jumpstart your project with an Al Accelerator

See reference code in action at https://community.datarobot.com/t5/ai-accelerators/bd-p/ai_accelerators

Thank You