DOMINO

Domino Enterprise MLOps Platform

Data is expanding exponentially, but unlocking its value requires new expertise and real science. Data science done right promises new levels of innovation, efficiency and growth. Leading organizations are using data to create differentiation, new revenue streams and better customer experiences. These companies are winning by weaving data science models into the fabric of their business. In today's world, organizations that fail to invest in data science risk being disrupted or left behind by competitors.

Challenges to Becoming Model Driven

FOR DATA SCIENCE TEAMS

Data science teams often find quick wins with a few "experimental" projects, only to get stuck with new challenges when trying to scale:

- **Inflexible Infrastructure.** Data scientists are unproductive without access to powerful compute, high-value data, and the latest open-source tools. Time spent on DevOps tasks with bespoke tools and hardware reduces innovation.
- **Wasted Work.** Data scientists often work independently with many different tools. Low standardization and visibility of work creates duplicate efforts, barriers to collaboration, and poor reproducibility.
- **Production Pitfalls.** Many data science models stop performing well in production due to undetected changes in customer preferences, new competitive threats, and new business conditions. The lack of repeatable processes from deployment to monitoring adds hidden costs, complexity, delays, and compliance risk.

FOR DATA & ANALYTICS EXECUTIVES

CDOs, CDAOs and other executives must foster a data culture that creates innovation and competitive advantage. Retaining top talent, building customer trust, and accelerating revenue are harder with outdated technology, decisions based on intuition, and poorly governed data science.

FOR IT LEADERS

IT leaders want to be a strategic partner and enable data science teams to innovate. But this is a daunting goal when data science has grown organically, with different teams having different sets of tools, infrastructure, and processes to build models that may not align with critical IT and security standards.

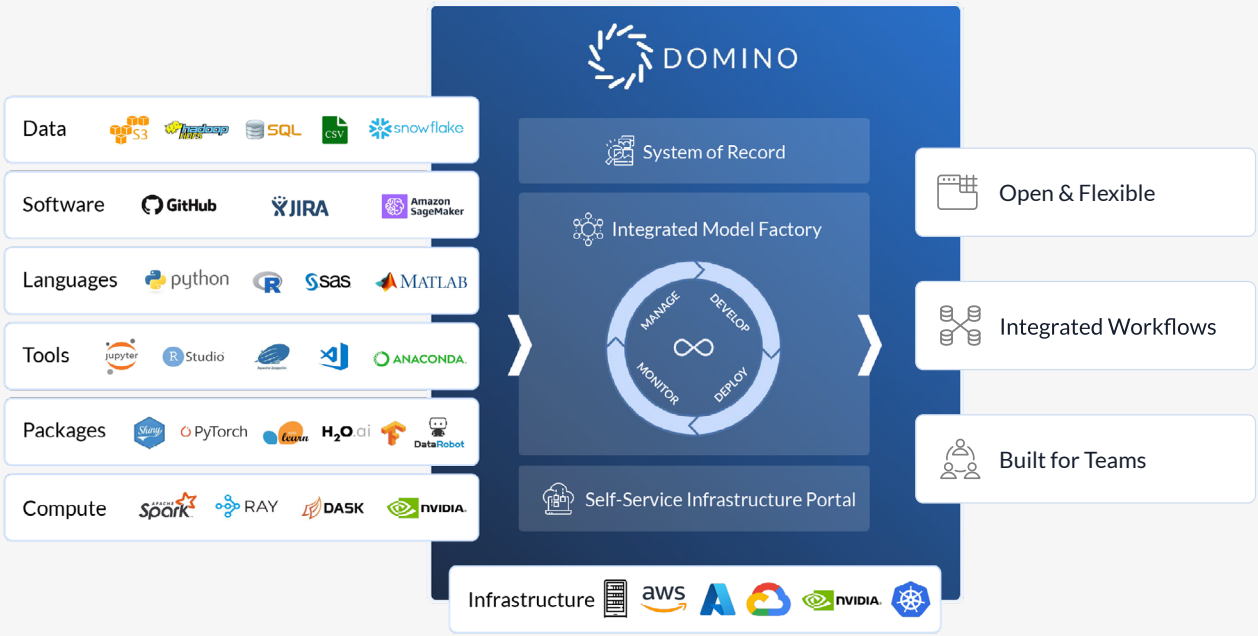
Overcoming these challenges requires a new approach. Successful data science today requires more than experimentation by a few experts. It requires technology that helps mature data science as a holistic system and discipline.

Platform Overview

The Domino platform enables organizations to become model-driven by accelerating the development and deployment of high quality models. Domino scales data science and its value with a centralized and modern platform that data scientists love and IT administrators trust.

The Domino platform accelerates productivity and collaboration for teams of professional data scientists with the most open and flexible self-serve access to tools and infrastructure. Domino helps leaders empower their teams to onboard quickly, standardize work, collaborate, and track a portfolio of projects and their performance. Armed with the latest modern technology, organizations engage top talent and create a culture of data innovation and success.

Domino tames the "wild west" of data science by enabling IT with centralized resource management, security, and governance. Domino centralizes data science silos into a single platform that delivers self-service access to tools and infrastructure that are secure and compliant. Domino dramatically reduces the volume and cost of IT support for data science.



Why Domino?

Open and Flexible

Domino supports the broadest ecosystem of open-source and commercial tools, infrastructure and compute frameworks such as Spark, Ray, and Dask on a single platform that spans on-premise, cloud, and hybrid environments.

Built for Teams

Teams using different tools can seamlessly collaborate on projects and rely on Domino to automatically track all data science artifacts with full visibility, repeatability, and reproducibility for every use case.

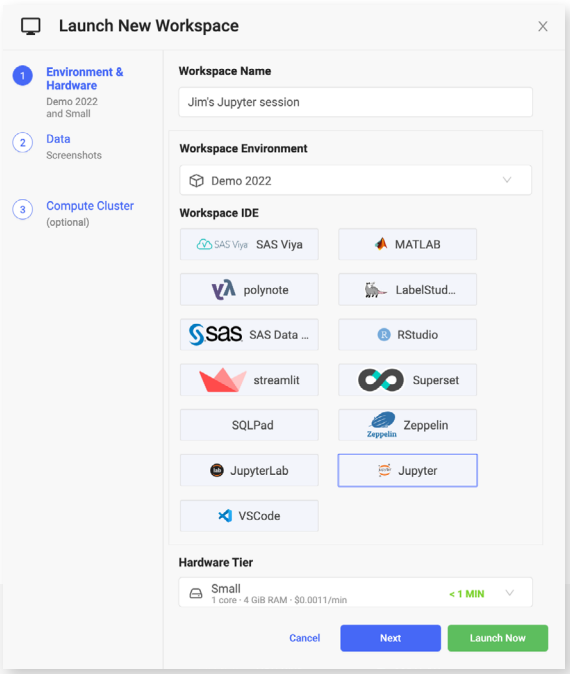
Integrated Workflows

Domino integrates workflows to accelerate the full lifecycle from experiment to production with common patterns and practices regardless of underlying tools so everyone involved in data science can maximize their productivity and impact.

The Domino platform comprises three essential layers for an Enterprise MLOps platform.

First, the **Self-Service Infrastructure Portal** provides elastic compute, software and environment management, and a unified data access layer. Data science teams have instant access to:

- The latest open-source and commercial tools
- Languages such as Python, R, SAS, and MATLAB
- Scalable compute clusters across any cloud, region, or on-premises
- Distributed frameworks such as Spark, Ray, and Dask
- NVIDIA GPUs for model training and inference
- High value data from a wide variety of sources

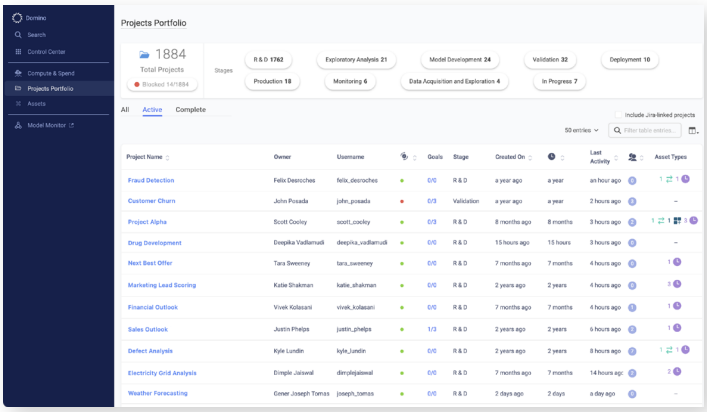


Next, the **Integrated Model Factory** empowers data scientists with a powerful workbench and streamlined workflows to iterate rapidly through the end-to-end data science lifecycle:

- Experiment with preferred tools and infrastructure
- Deploy models as APIs or export them as Docker images to CI/CD pipelines, AWS SageMaker, or other infrastructure
- Create interactive, scalable apps for non-technical users with Shiny, Dash, and Flask
- Ensure production models perform optimally with integrated monitoring of data drift and model quality
- Easily re-train, re-build, and re-deploy models by reproducing the original development environment

Finally, the **System of Record** enables data scientists to capture and automatically track changes to code, data, tools, and packages:

- Roll back instantly to exact model environments to simplify audits, governance, and compliance
- Search all data science IP in a central repository to build on prior work
- Track project goals, status, and progress in simple dashboards
- Incorporate data science into enterprise processes with Git and Jira integration



Customer Validation

Lockheed Martin estimates Domino has helped their 300+ data scientists become 10x more productive, saving $20M annually.

"The Domino platform is at the core of our modern data science environment, which has helped maximize the efficiency, productivity and output of our data science teams, helping us drive innovation in support of customers' mission."

MATT SEAMAN
Enterprise Operations Chief Data Scientist,
Lockheed Martin

Johnson & Johnson estimates Domino enables 10x faster training of deep learning models and helps identify 4x more eligible patients for trials with better predictions.

"We're leveraging data science to improve the probability that a therapy or medicine actually becomes a transformational medicine for patients. Domino has been one of the underpinnings of being able to scale – a standardized way of having all the data, models, applications in one place."

DR. NAJAT KHAN
Chief Data Science Officer,
Janssen Pharmaceutical Companies of Johnson & Johnson

Bayer estimates that Domino has helped generate $100 million in NPV over three years.

"Domino has made it easier for users across the global enterprise, using different tools and with varied backgrounds and skill sets, to work with each other, leverage past work, and collaborate quickly."

NAVEEN SINGLA
Former Data Science Center of Excellence Lead,
Bayer

Become model-driven with Domino

LEARN MORE

Talk to a sales representative or solution engineer to learn how Domino can help you scale your data science efforts, accelerate model velocity, and forge your path to a model-driven future.

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