



Grid Dynamics Solutions

Analytics and Machine Learning Platforms in AWS

www.griddynamics.com



Contents

| | |
|---|----|
| Thought Starters: Analytics Platforms and MLOps | 3 |
| Solutions: Analytics Platforms and MLOps | 4 |
| Our Technologies | 5 |
| Analytics Platform in AWS: Reference Architecture | 6 |
| ML Platform in AWS: Reference Architecture | 7 |
| Case studies: | |
| Analytics Platform for a leading electronics manufacturer | 8 |
| Analytics Platform for a leading apparel company | 9 |
| ML Platform for a leading insurance company | 10 |
| About Grid Dynamics | 12 |

Thought Starters: Analytics and MLOps



Translate data into business value



Cut costs in operational and maintenance areas

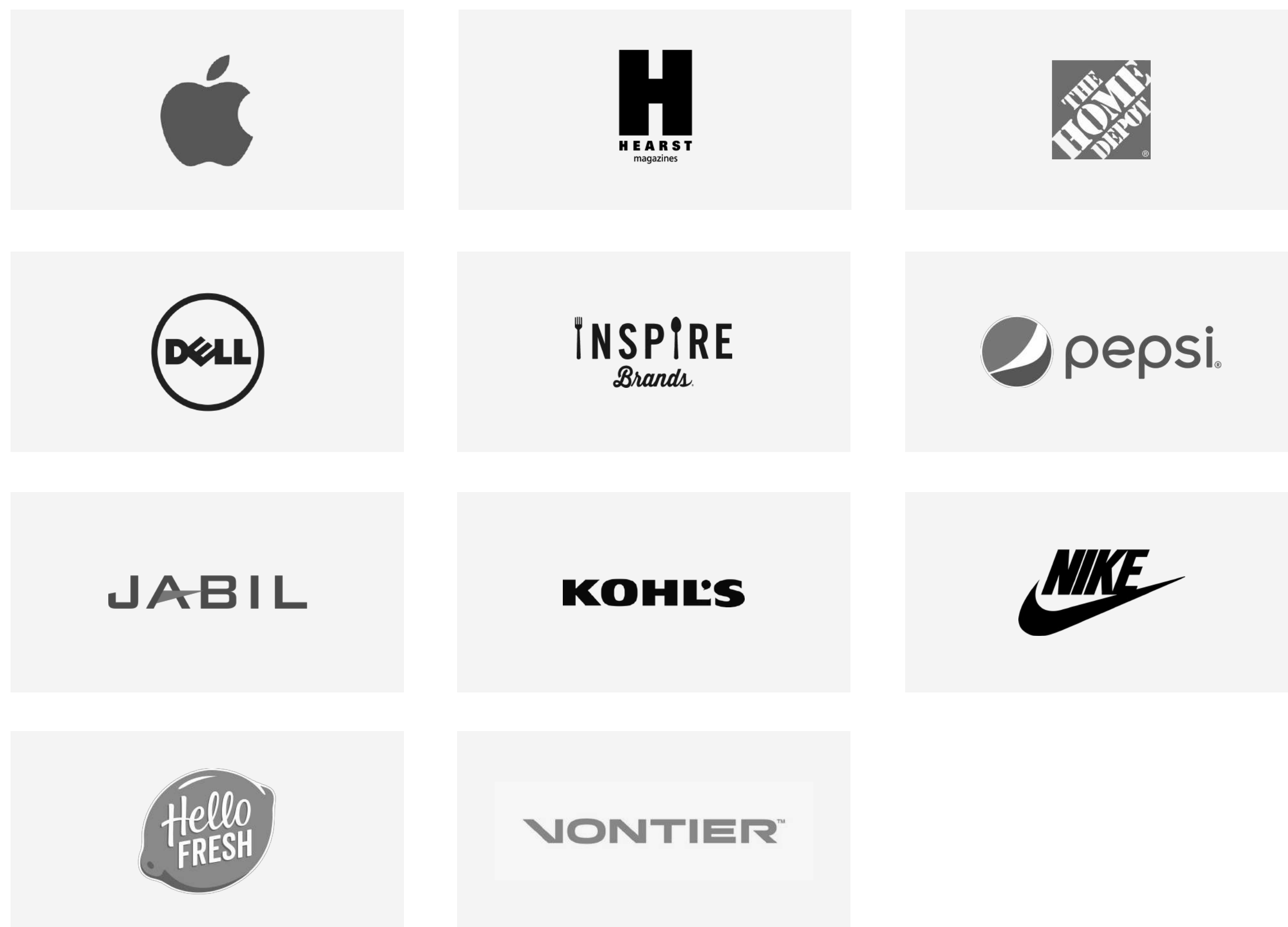


Capture substantial value from improved efficiency



Uncover new revenue and growth opportunities

Some of our clients in the area of data engineering and MLOps



Solutions: Analytics Platforms and MLOps

We build AWS-based data platforms and ML platforms for leading technology, retail, manufacturing, and finance companies.

Data Platforms

We accelerate the provision of big data platforms in AWS that include data processing, quality control, governance, and self-service analytics capabilities.

Data Cloud Migration

We accelerate the migration of legacy on-premise data solutions such as Teradata to public clouds, transforming technology and business processes, and drastically lowering costs.

Data Quality and Governance

We provide data quality control services that use machine learning and rule-based checks to ensure data quality and consistency for optimized analytics and business processes.

ML Platforms

We accelerate the provision of enterprise-grade ML platforms and MLOps processes that support feature management model development, versioning, monitoring, and serving.

Customer 360 Platforms

We help to develop end-to-end Customer 360 and MarTech strategies, extend data platforms with marketing-specific features, and setup customer data management processes.

IoT Platforms

We create specialized data and ML platforms that use cloud-native IoT services to collect data from machines, monitor anomalies, and deploy ML models on the edge.

Our Technologies

At Grid Dynamics, we created a strong lineup of starter kits that help to significantly accelerate the delivery of typical projects and reduce time to market. These starter kits are developed in close collaboration with AWS.

Analytics Platform

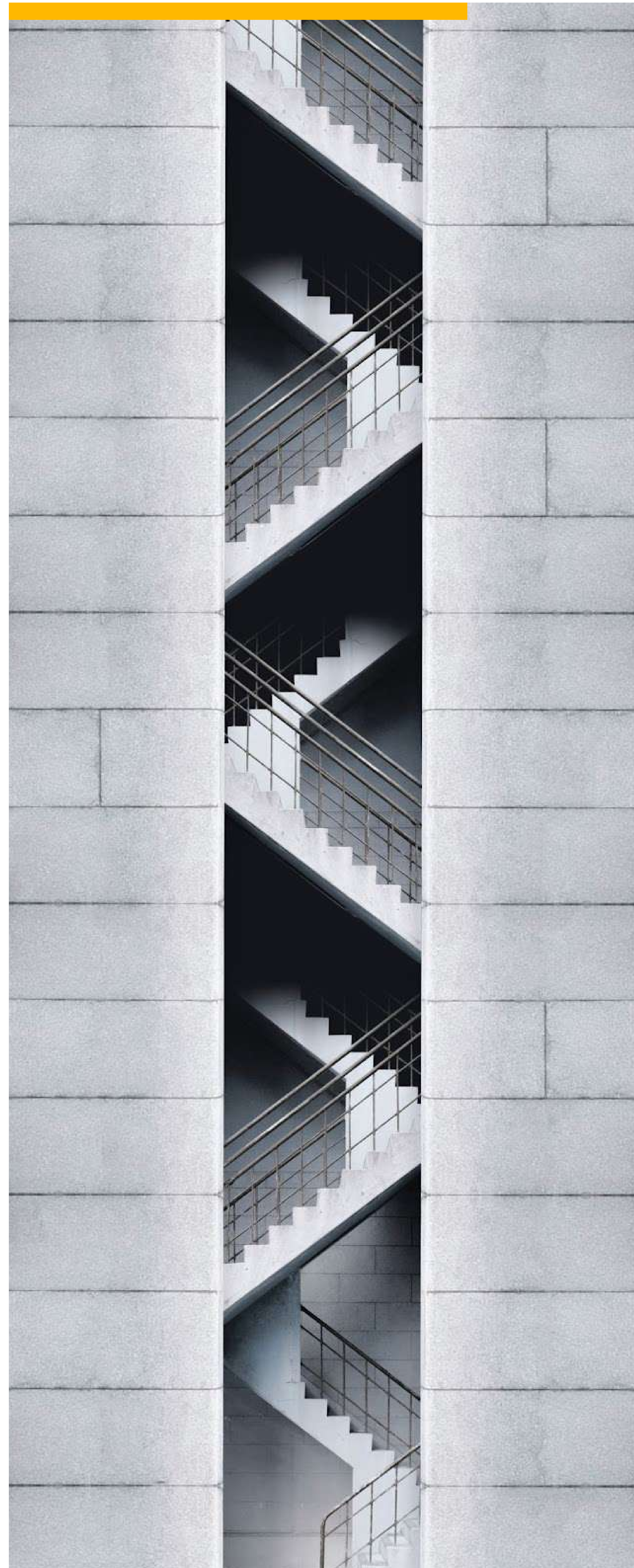
We provide starter kits for rapid provisioning of scalable data analytics platforms in AWS. You can deploy a preconfigured cloud-native platform that includes the following services:

- Data ingestion and processing
- Data pipeline orchestrations
- Data quality control
- Data governance
- Data security and access control

ML Platform

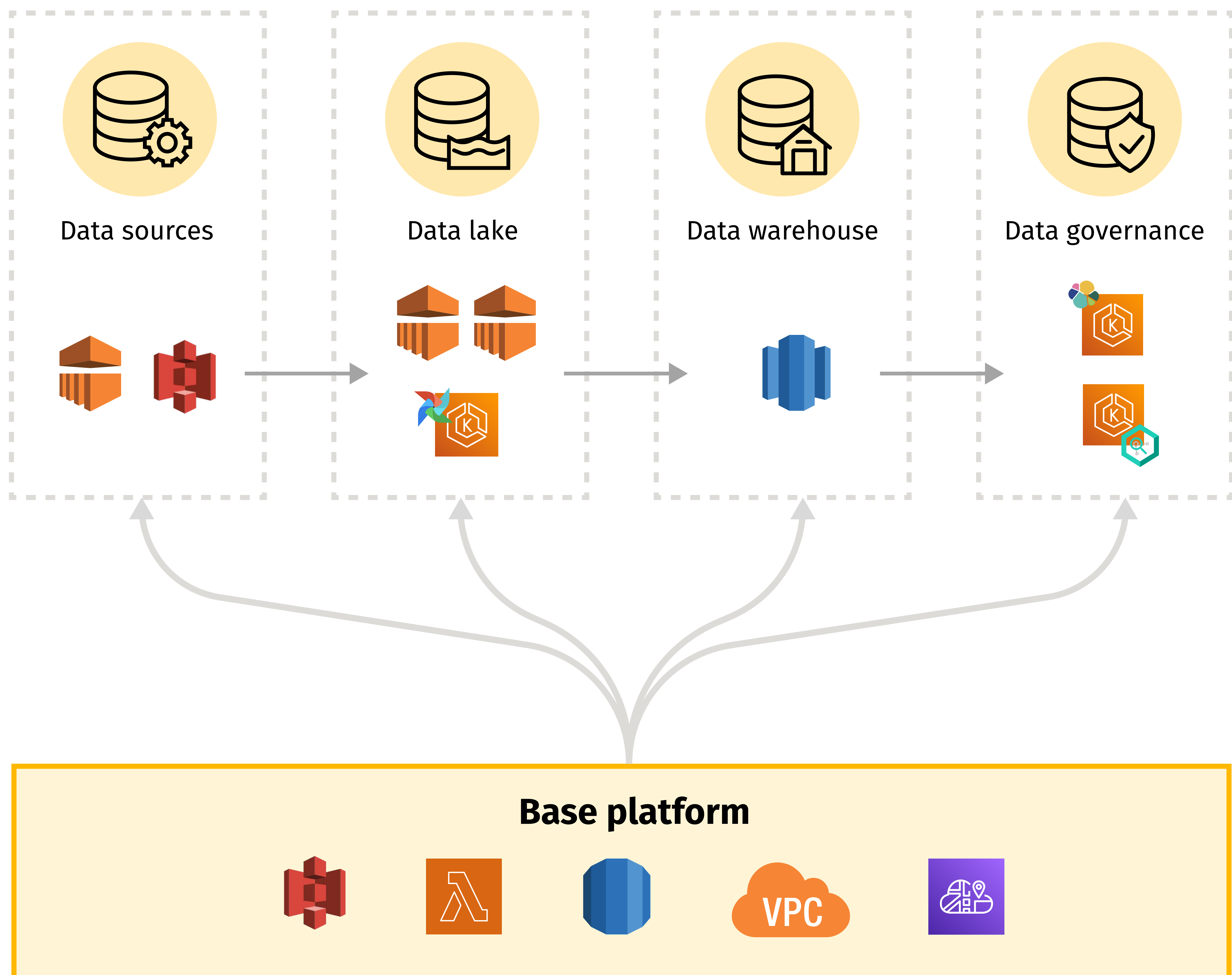
Our starter kit for the development of ML platforms combines cloud-native services and open source components to enable end-to-end AI productization. You can provision a preconfigured platform with the following capabilities:

- Feature store
- Model development workbench
- Model repository
- Model serving
- Experiment tracking



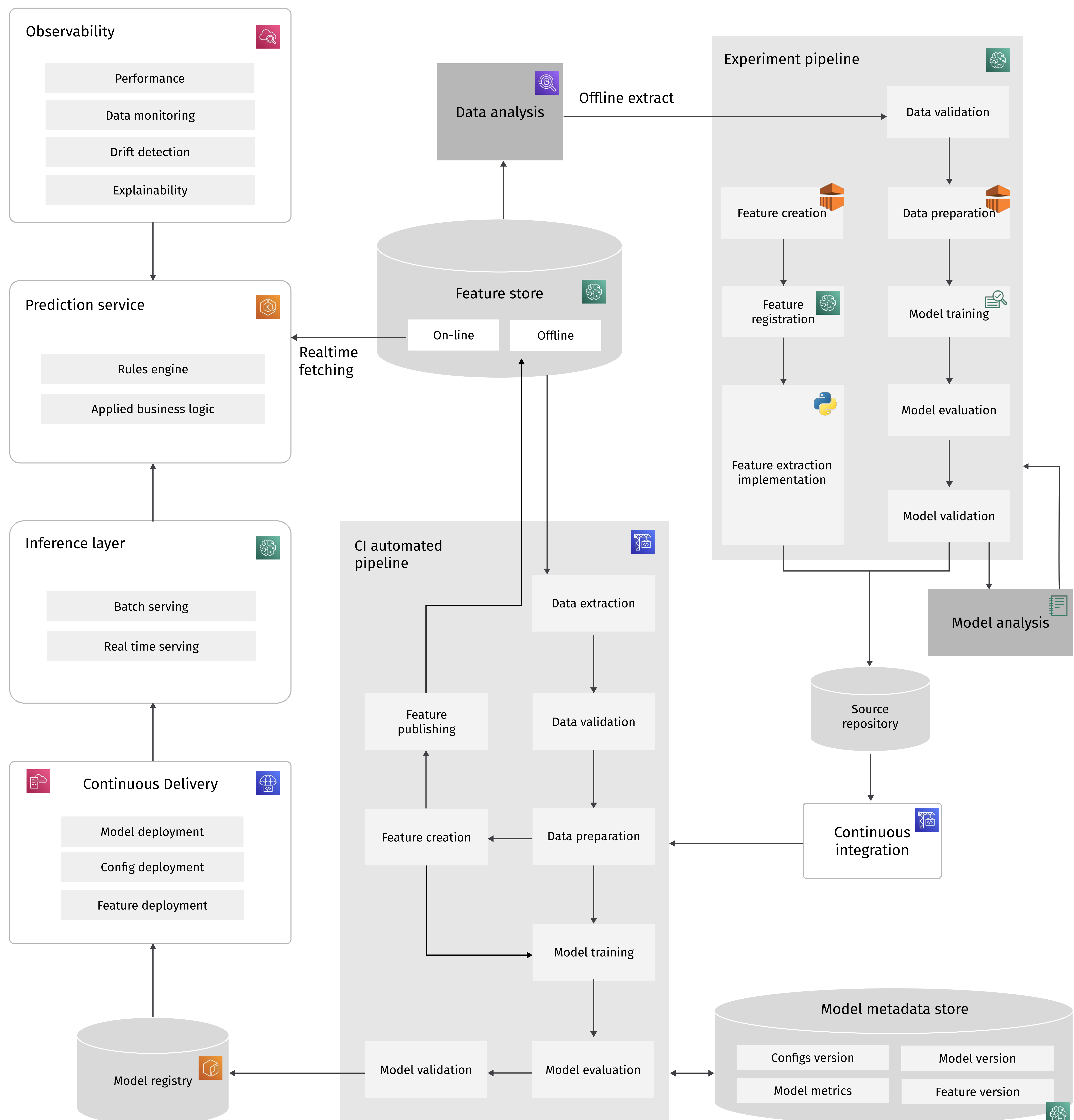
Analytics Platform in AWS: Reference Architecture

Our Analytics Platform Starter Kit for AWS is a culmination of years of experience that enables rapid provisioning of an AWS-native analytics platform and implementation of data pipelines at scale. The pre-integrated, battle-tested starter kit is designed to drastically reduce time-to-market, improve data accessibility and quality, increase speed-to-insights, and achieve significant ROI. You can build a production-ready, modern analytics platform within weeks on AWS cloud.



ML Platform in AWS: Reference Architecture

Efficiently scale machine learning efforts in the enterprise while adopting MLOps and increasing the quality of insights on an AWS-native ML Platform with our ML Platform Starter Kit for AWS. You can build a production-ready, cloud-native machine learning platform that enables end-to-end AI productization within weeks on AWS cloud. The starter kit is designed to improve data accessibility and quality, increase speed-to-insights, and achieve significant ROI.



Analytics Platform for a leading electronics manufacturer

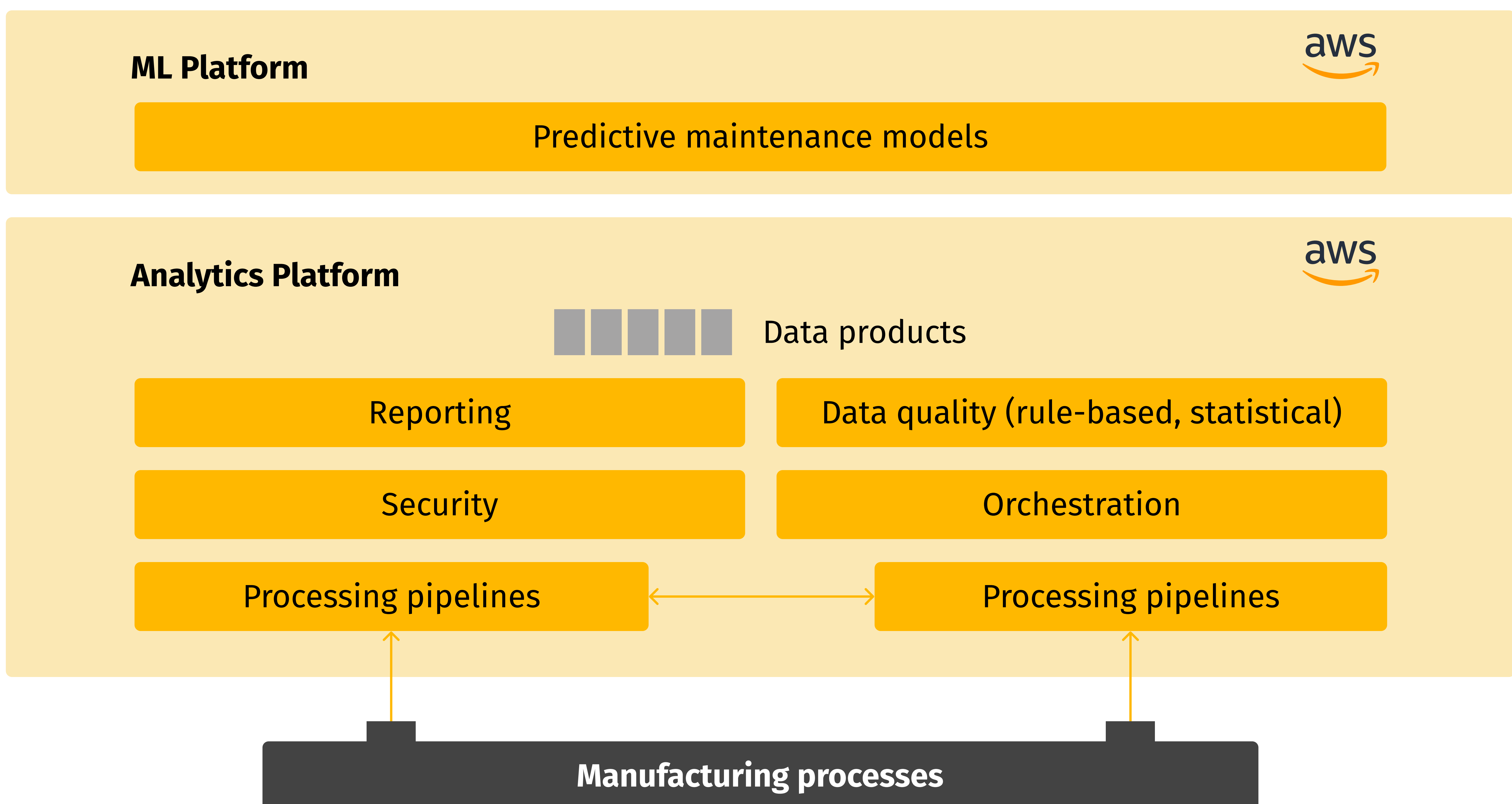
This leading electronics manufacturer operates with massive amounts of IoT data coming from facilities all around the world. Our Analytics Platform was used to aggregate several types of sensor data and enable analytics and AI use cases such as predictive maintenance.

| | | |
|---------------------------|----------------------------|------------------------------|
| 5M messages/day | 30+ metric types | 2TB monthly volume |
|---------------------------|----------------------------|------------------------------|

Outcomes

| | |
|---|--|
| platform for manufacturing data analytics | 5 months from the initial analysis to production |
|---|--|

- The platform was developed and deployed to production in 5 months with several business use cases.
- The platform provides unified access to the data with easy onboarding for engineering and business users.
- The platform enabled multiple AI/ML use cases.





Analytics Platform for a leading apparel company

This leading apparel company interacts with millions of customers worldwide through digital channels. The company was looking to consolidate stock and shipment data into a single dashboard for a specific region.

Grid Dynamics was engaged to build a data platform along with data reporting and visualization. Dashboards were used by multiple teams to track fulfillment and shipment status.

10M
daily updates

US & Europe
regions

Outcomes

real-time
inventory views

2 months
from the initial
analysis to production

- The solution enabled immediate visibility of fulfilment and shipment status, with the following features:
- Data platform with pluggable data sources;
- Infrastructure-as-a-code;
- Near real-time dashboards with stock and shipment information.

ML Platform for a leading insurance company

This major US insurance company was looking for a partner with which to start a cloud journey.

The company decided to migrate their data platform to AWS cloud and build MLOps services on top of it.

Grid Dynamics was engaged to build a new generation data platform and integrate it with ML capabilities.

50M
customer profiles

30+
ML use cases

ML models
batch and real-time

Outcomes

cloud
infrastructure

GDPR/CCPA
compliance
implemented

- Grid Dynamics helped the company migrate part of the infrastructure and services to AWS.
- We developed a data platform with MLOps capabilities.
- The applications were built from scratch according to modern practices and standards.





Engage with Grid Dynamics

1

Our team of data experts work with you to **define a corporate data strategy** and **create roadmaps** for cloud data migration, data governance, or data monetization.

2

We work with you to define an optimal **engagement model** that can include both your and Grid Dynamics teams. We leverage our **starter kits** built using open source and cloud-native components to accelerate the implementation.

3

We deploy **cross-functional** teams with proper domain/technology leadership to execute projects from the roadmaps and deliver solutions end-to-end. Our teams usually work with client's stakeholders and product owners in a **co-innovation** model.

4

We focus on **iterative execution** of the roadmaps to deliver business value in short phases, but also continuously **refine the strategy** and come up with improvement proposals.

5

The co-innovation approach helps you to **establish a strong technology culture** in your organization, efficiently manage the roadmaps, and scale your data capabilities.

About Grid Dynamics

Grid Dynamics is a global digital engineering company that co-innovates with the most respected brands in the world to solve complex problems, optimize business operations, and better serve customers. Driven by business impact and agility, we create innovative, end-to-end solutions in digital commerce, AI, data, and cloud to help clients grow.

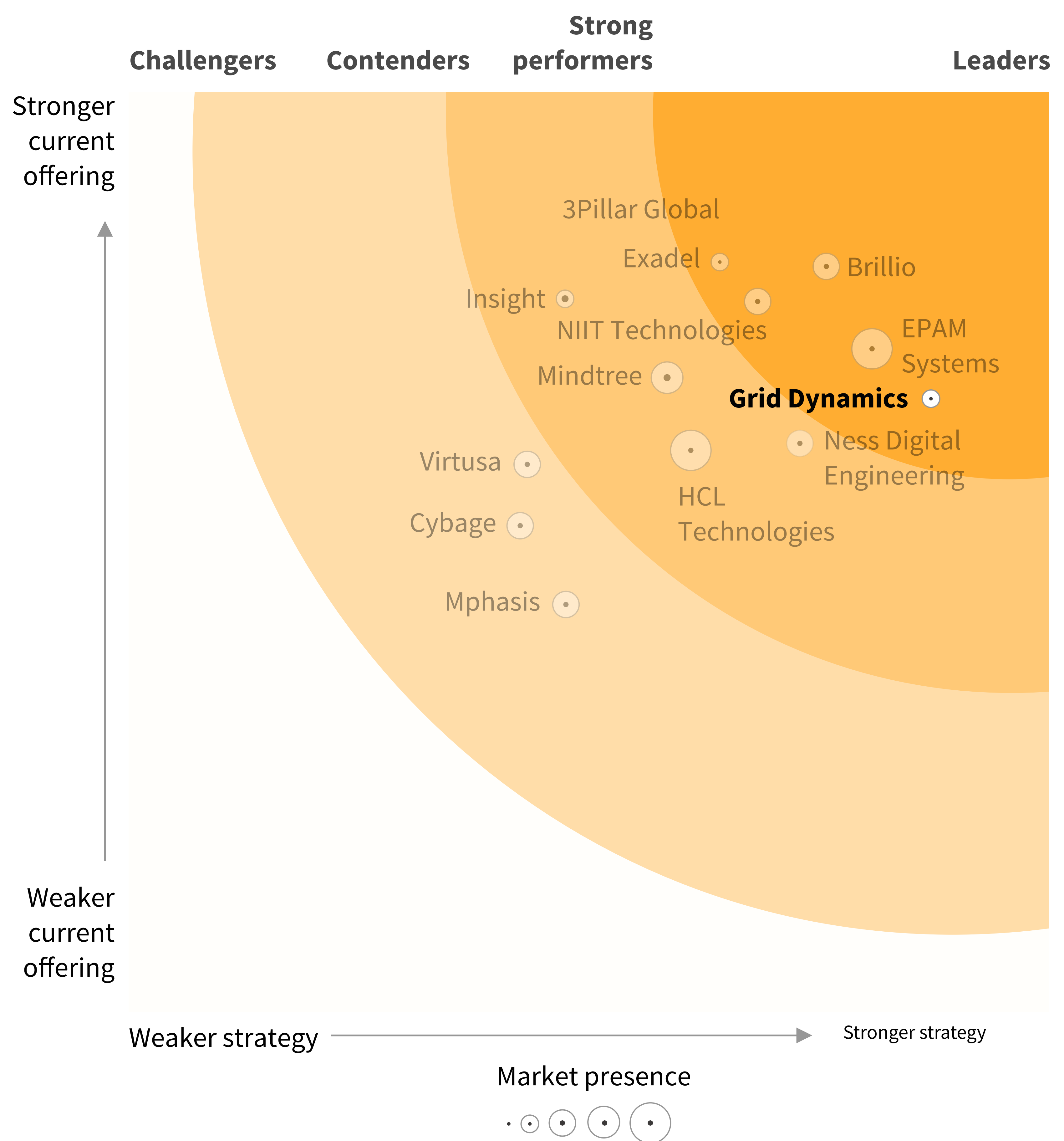
Headquartered in Silicon Valley, with delivery centers located throughout the globe, Grid Dynamics is known for architecting revolutionary digital technology platforms for 7 of the 25 largest retailers in the US and 3 of the 10 largest consumer goods companies in the world, as well as leading brands in the digital commerce,

manufacturing, finance, healthcare, and high tech sectors.

Our secret sauce? We hire the top 10% of global engineering talent and employ our extensive expertise in emerging technology, lean software development practices, a high-performance product and agile delivery culture, and strategic partnerships with leading technology service providers like Google, Amazon, and Microsoft.

In 2019, Forrester named Grid Dynamics a leader among midsize agile development service providers. In 2020, Grid Dynamics went public and is trading on the NASDAQ under the GDYN ticker.

The Forrester wave™ Midsize Agile Development Service Providers Q2 2019





About Grid Dynamics








Key facts

- 13 countries across North America, Europe, and Asia
- 3,800 employees in Q3 2022
- Forrester Leader Midsize Agile Software Development Service Provider Q2 2019
- Proprietary starter kits developed in collaboration with AWS and other partners

Areas of expertise

- **Experience engineering**
Web | Mobile | AR/VR
- **Data Science and AI**
Search | Personalization | Supply chain | IoT
- **Platform engineering**
Microservices | MACH | Composable
- **Data engineering**
Big data | Streaming | MLOps
- **Cloud and DevOps**
CI/CD | AIOps | SRE | QE

Clients

| | | |
|---|---|---|
|  | Google |  |
| align |  |  |
| RAYMOND JAMES |  | AMERICAN EAGLE |
| LVMH |  |  |



Grid Dynamics Holdings, Inc.

5000 Executive Parkway,
Suite 520 / San Ramon, CA
650-523-5000
www.griddynamics.com