# Retail Execution Data Hub on AWS

About Sigmoid

# Sigmoid is an emerging leader in data engineering and AI solutions.

**750+**
Employees

Work with **30+**
Fortune 500 firms

**>97%**
CSAT score

**200+**
ML models operationalized

**5000+**
Data pipelines built

Backed by

**SEQUOIA**

## Awards and Recognition

**500** Technology **Fast 500**
2023 NORTH AMERICA
Deloitte.

**iSG** | Provider Lens | 2023 Quadrant
**Analytics Services**
Rising Star, U.S.
Report releasing Jan 2024

**Inc. 5000**
AMERICA'S FASTEST-GROWING PRIVATE COMPANIES
America's Fastest-Growing Private Companies

DATA BREAKTHROUGH AWARD 2021
Open Source data solution provider of the year

**FORRESTER**
Now Tech: AI Consultancies, Q1, 2021 Report

Major Contender in
**EVEREST GROUP**
Analytics and AI Services Specialists
PEAK Matrix (2022)

**Offices**

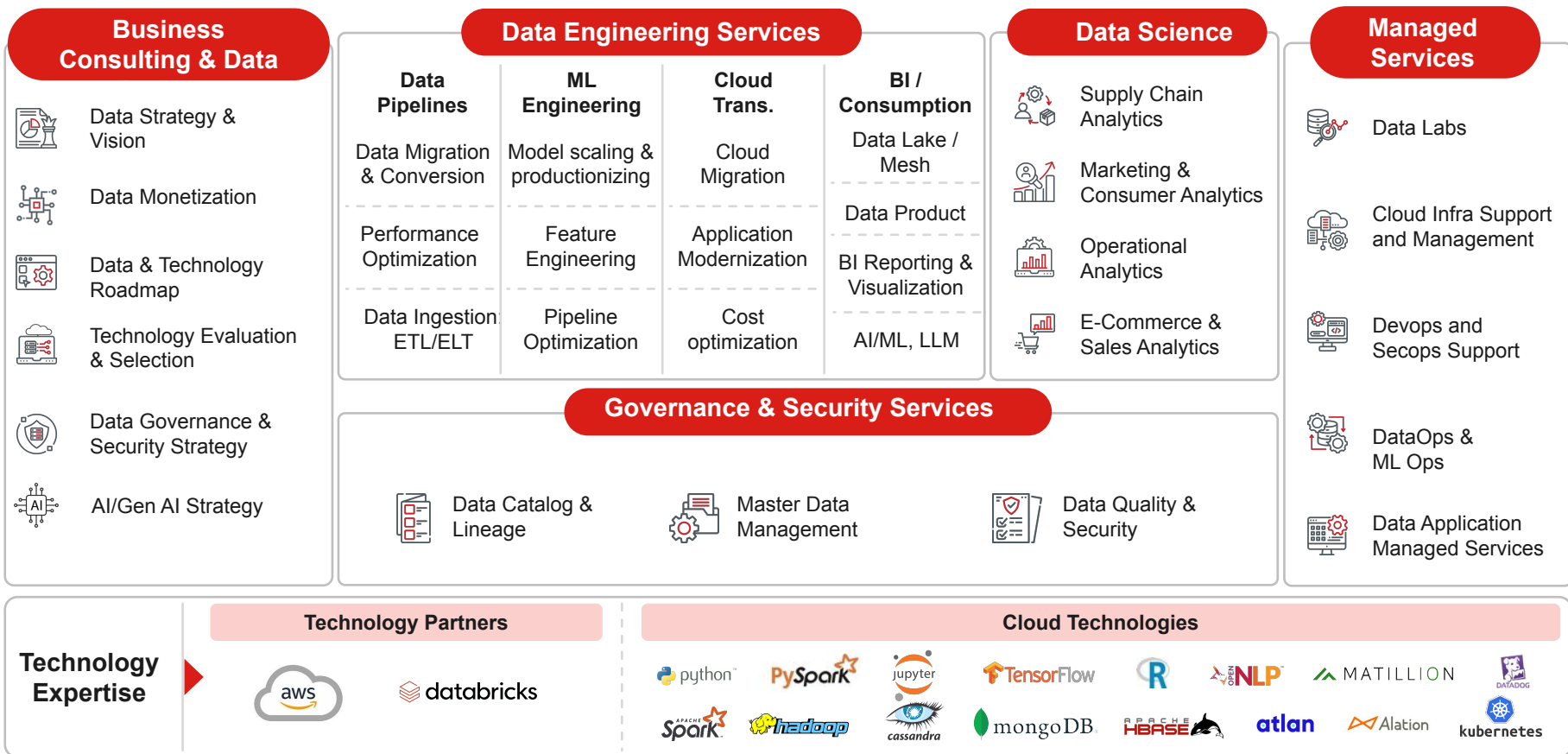New York | San Francisco | Dallas | Lima | Bangalore | Amsterdam | London | Sao Paulo

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# Enabling Business Transformation with Full-Service Capability Suite

## Business Consulting & Data

- Data Strategy & Vision
- Data Monetization
- Data & Technology Roadmap
- Technology Evaluation & Selection
- Data Governance & Security Strategy
- AI/Gen AI Strategy

## Data Engineering Services

| Data Pipelines | ML Engineering | Cloud Trans. | BI / Consumption |
|---|---|---|---|
| Data Migration & Conversion | Model scaling & productionizing | Cloud Migration | Data Lake / Mesh |
| Performance Optimization | Feature Engineering | Application Modernization | Data Product |
| Data Ingestion ETL/ELT | Pipeline Optimization | Cost optimization | BI Reporting & Visualization |
| | | | AI/ML, LLM |

## Data Science

- Supply Chain Analytics
- Marketing & Consumer Analytics
- Operational Analytics
- E-Commerce & Sales Analytics

## Managed Services

- Data Labs
- Cloud Infra Support and Management
- Devops and Secops Support
- DataOps & ML Ops
- Data Application Managed Services

## Governance & Security Services

- Data Catalog & Lineage
- Master Data Management
- Data Quality & Security

## Technology Expertise

### Technology Partners

aws    databricks

### Cloud Technologies

python    PySpark    Jupyter    TensorFlow    R    OPEN NLP    MATILLION    DATADOG

APACHE Spark    hadoop    cassandra    mongoDB    APACHE HBASE    atlan    Alation    kubernetes

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# Sigmoid Capabilities - Experience in implementing data solutions in AWS

**Sigmoid has worked with more than Five large customers to design, build and deploy solutions in AWS**

### Data Processing & Transformation:

- **Amazon EMR:** Collaborative Apache Spark-based analytics platform used for big data processing and machine learning.
- **AWS Glue:** Fully managed ETL (Extract, Transform, Load) service for preparing and transforming data.

### Data Storage & Management:

- **Amazon S3:** Scalable and secure data lake for storing large amounts of structured and unstructured data.
- **Amazon RDS:** Managed relational database service for structured data storage.

### Data Ingestion & Integration:

- **AWS Data Pipeline:** Creating data workflows that move and process data across AWS services.
- **Amazon Kinesis:** Real-time data ingestion from applications, devices, or any streaming data sources.

### Data Analytics & Visualization:

- **Amazon Redshift:** Data warehouse service used for analyzing large datasets with either serverless or provisioned resources.
- **Amazon QuickSight:** Business intelligence tool for creating interactive visualizations and reports.

### Machine Learning & AI:

- **Amazon SageMaker:** End-to-end platform for building, training, and deploying machine learning models.
- **AWS AI Services:** Pre-built AI services for vision, speech, language, and decision-making (e.g., Amazon Rekognition, Polly, Comprehend, Textract**).**

### Security & Compliance:

- **AWS IAM (Identity & Access Management):** Identity and access management service.
- **AWS Organizations & AWS Config:** Governance and compliance tools for managing AWS environments at scale.

**Data Products**

Sigmoid's implementation of solutions in AWS involves leveraging a combination of services and tools tailored to specific business needs. Sigmoid would facilitate collaboration between data engineers, data scientists, business analysts, and other stakeholders to align the implementation with business goals and ensure success.

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# Retail Execution Data Hub

# Sigmoid's Retail Execution Data Hub solving data challenges and giving visibility to retail sales teams

## Headwinds in Retail Execution

### Complexities in the retail environment

**Complex retail landscape** with modern trade being an important channel. Also **lack of visibility on in-store retail execution**

**Intense competition for visibility** and **difficulty in comparing performance** of granular media strategies

**Inability to measure retail execution** in a timely manner and take immediate actions

### Challenges due to disparate data

**Variations in data formats and structures** due to data coming in from third party sources, partners or public APIs

**Legacy Systems lacking modern integration capabilities**

## Solved by our Data Hub with Curated Views

### Solving challenges around fragmented retail data, lack of data quality & lack of timely execution

**A single source of truth to** track performance of key metrics and measure success of retail execution strategies at granular level

Provides **out of the box dashboards for different Personas** like Executives, Category/Brand Managers Retail Managers, etc.

Address multiple areas of retail execution including metrics like, **Sales, Day 1 readiness, On Shelf Availability,** etc.

### Solving for key data management challenges

**Aggregates, consolidates and harmonizes** the data across varied sources, performing **data quality checks**, ensuring data consistency

## Driving Benefits for CPGs in a short span

**Automated dashboards** with quick loading - reduction of loading time by 90%

Generation **50% of cost savings** opportunities due to curated views such as inventory visibility, On-Shelf Availability tracking, etc

**High granularity** of our solution showed the impact of retail policies at an individual store level, enabling the tracking of store level metrics

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# Success Story - Improvement in Retail Store Execution
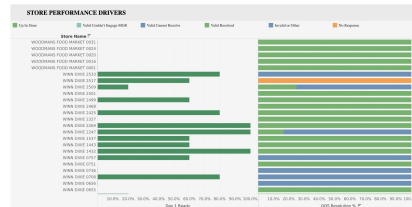
## Case Background

- The client is a **leading company in global snacking**, international cereals and noodles, with iconic world-class brands

- **The retail sales team** needed to keep a track of sales, inventory, product placement across different stores, territory and area

- **They relied on legacy data warehouse and un intuitive dashboards**, lead to time-consuming processes, errors

- They **wanted an automated solution with enhanced user friendly dashboards for relevant KPIs**

## Sigmoid Solution

Created a cloud data store by unifying multiple data sources to furnish data at most granular level (store, product and week)



Unified hub meeting the needs of different personas – summary views for leadership and detailed analysis for retail sales team

Fast loading dashboards with data privacy protocols enabling analysis till store level. Also streamlined data refreshes and validation mechanism ensures data continuity and consistency
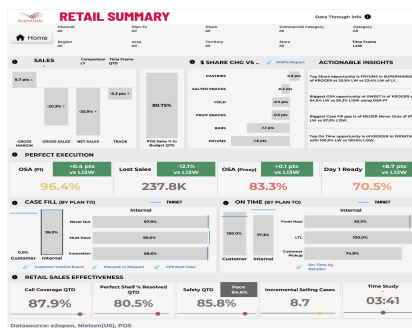
## Business Impact

**90%** improvement in query performance

**80%** coverage of retailers in the USA

**5x** Cost reduction from decommissioning on-prem data centres

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# Engagement Models

# Sigmoid's Engagement Models

## Project Based

- Starts with consulting/scoping (2-3 weeks)
- Delivery Program Management
- Interim review
- Success criteria met and IP handover
- Option to continue with product support
- Fixed bid contract
- 3-5 months duration given complexity of problem

### Benefits

- Cost effective
- KPI/SLA/Outcome driven
- Suitable for Fixed scope of work
- Less overheads

## Staff Augmentation

- Understanding of skill requirements
- Profile match and rate card
- Onboarding and monthly billing
- Focused training based on client tech stack
- Project Management support
- 10% backup resources unbilled and trained

### Benefits

- Scalability
- Flexibility in resourcing
- Ability to change/redefine scope

## Hybrid-Flexi Model/Data Labs/CoE

- Mix of project and staff augmentation engagements
- Requirement gathering
- Requirement classification - as project or staff augmentation
- Joint delivery plan
- Secure resources internally from Sigmoid and bill monthly
- Dedicated PM, Engineering Managers
- Dedicated Management Consultant(s)
- Dedicated Team Leads and Product Owners

### Benefits

- Cost effectiveness by focus on output
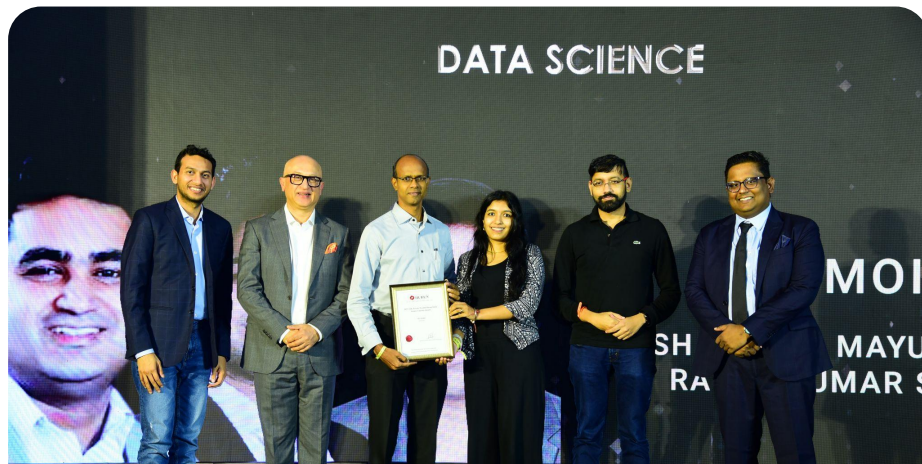- Ability to change/redefine scope/Change requests
- Risk/Reward linked to KPI/SLA

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# Thank you

📧 Email: abhishek.vora@sigmoidanalytics.com
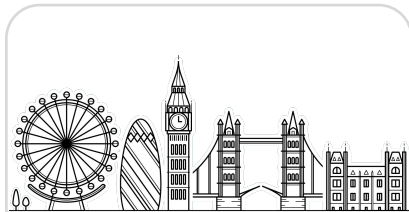
🌐 Website: www.sigmoid.com



**'India Future Unicorn Award'**
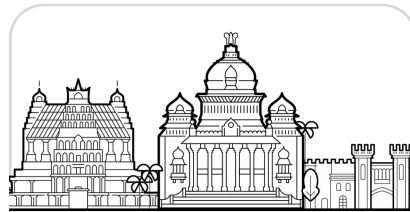in Data Science category by Hurun India

**Global presence:**



**USA** (NY, SF, Dallas, Chicago)



**EU** (Amsterdam, London)



**India** (Bengaluru)



**LATAM** (Lima)