



# ECommerce Campaign Optimization on AWS

[www.sigmoid.com](http://www.sigmoid.com)



# 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



America's  
Fastest-Growing  
Private Companies



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

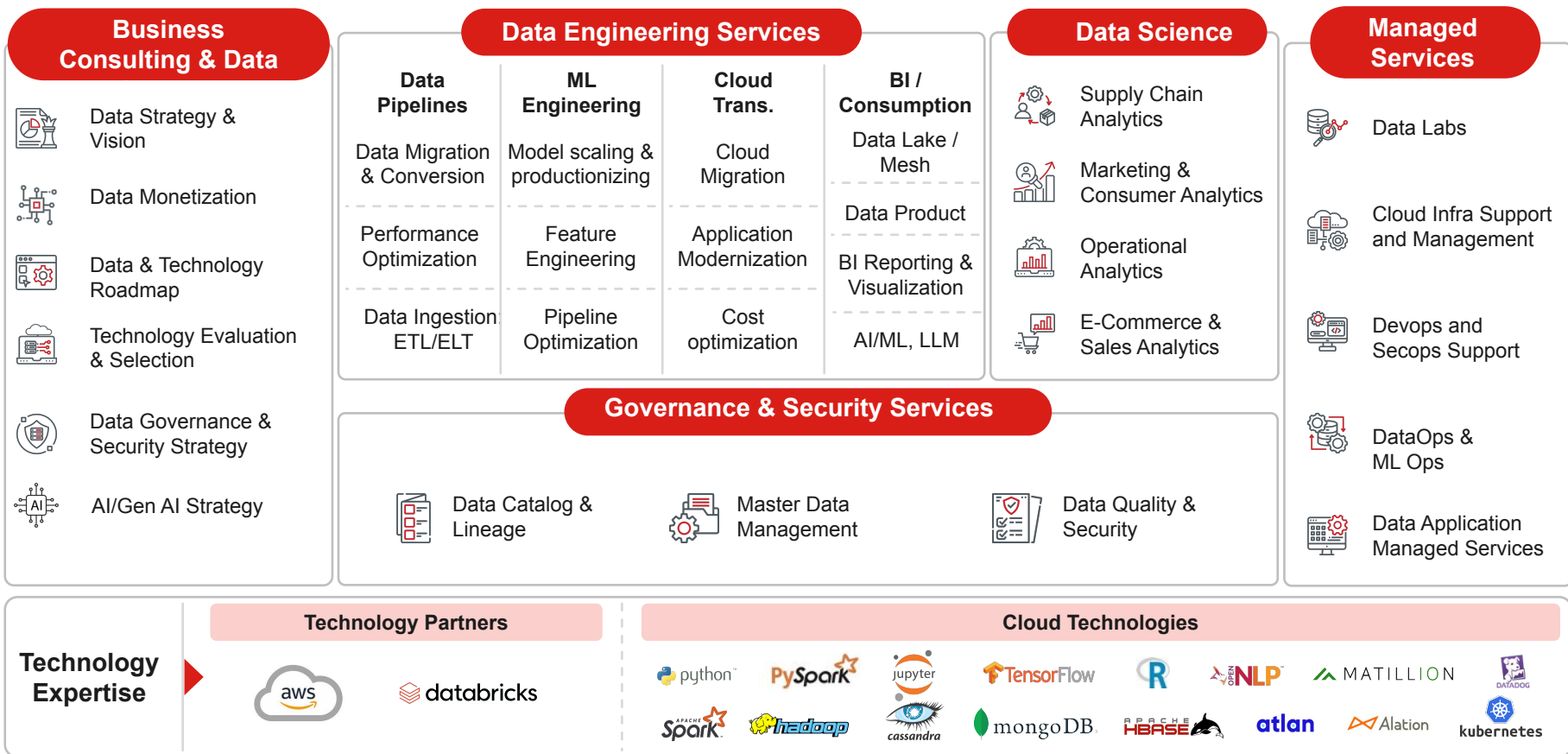


London



Sao Paulo

# Enabling Business Transformation with Full-Service Capability Suite



# 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 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:

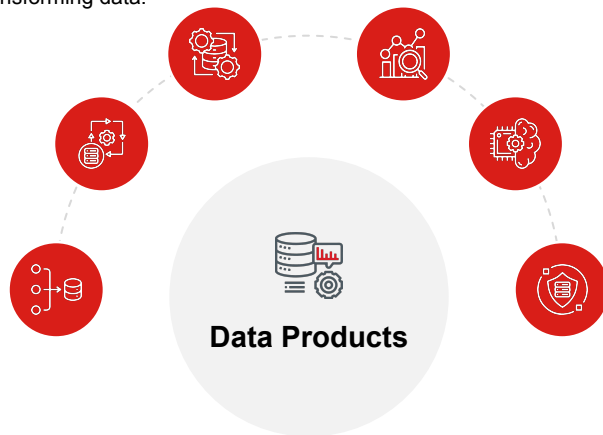
- **AWS IAM (Identity & Access Management):** Identity and access management service.
- **AWS Organizations & AWS Config:** Governance and compliance tools for managing AWS environments at scale.

## Data 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.



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.

# Display Campaign Optimization

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- 1 Implemented for F500 CPG Customers
- 2 Ability to work with or without 1P data
- 3 Able to optimize different metrics like - ROAS, Total Sales, eCPP etc.
- 4 Extending it for Search Campaign Optimization - Audience + Keywords + Settings
- 5 Audience Engine - Enhanced Cleanroom Solution for Critical Audience Insights



# Optimization of **Display Campaigns** run across ECommerce sites



## Headwinds in ECommerce Campaign Execution

### Opaque and rigid media strategy

Not being able to identify the **right audience to target and the right budget spend** against an audience group

Difficulty in determining **the right settings for the displays - bid, frequency, etc.** For a given context

Difficulty in determining **the performance of content on the fly and change parameters accordingly** if not working well

### Poor ROI due to Reactive decisions

**Challenges in simulating different budget combinations** allocated for different campaigns

**Challenges in the identification of the most relevant KPIs** for Campaign measurement



## Solved by our Display Campaign Optimization solution

### Automating the campaign setup for all the essential parameters

The solution is **capable to find the right audiences, bid values and other settings parameters** by itself for a certain campaign category

Allows the user **to setup the campaigns for a conversion metric of their choice**, integrating user-fed campaign parameters as well

Perfectly capable to **deliver results with or without 1P data**, with a continuous monitoring mechanism

### Additional Audience Insights for better Planning

Identification of **in-market audiences, audiences with competitors; also audience to be targeted based on 1P data** such as Loyalty points, shopping behaviour, etc.

**Audience transitions from one product to next and spillover effect** - cross-sell and upsell potential is also provided



## Benefits realized by a F500 CPG

**Generating more sales (avg ~60% up)** with less spending leading to a better ROAS

**30% cost savings** due to the optimization of non-performing campaigns

**High granularity** of our solution shows the impact of changed campaign parameters in record time

**3 weeks** for the integration of a new brand - scalability realized



# Search Campaign Optimization



- 1 Implemented for F500 CPG Customers
- 2 76 campaigns running under this solution currently
- 3 Managed **\$0.15M marketing budget** contributing around **\$4.7M e-Commerce Sales** in H2 2023

# Optimization of **Search Campaigns** run across ECommerce sites



## Headwinds in Gauging ECommerce Campaign Performance

### Opaque and rigid media strategy

**Manual settings selection**, with keywords selected on just historical performances

Simple analysis and **lack of visibility of cross campaign impact leads to cannibalization**

**Hard to determine constantly** which keyword x product combinations will perform consistently

### Poor Monitoring Mechanism leading to Reactive decisions

**eComm Platforms tend to over spend, when left unchecked.** Frequent checks are often not possible by campaign managers

Due to manual heavy lifting, **campaigns are not optimized for improvement**



## Solved by our Search Campaign Optimization solution

### Automating the campaign setup for all the essential parameters

Fully automated setup to control settings + budget periodically to improve necessary KPI's

**Multivariate analysis to select the right settings combinations**, for even historically unrelated scenarios, with **intelligent keyword mining capabilities**

**Multiple AB campaigns** to test and learn product, bids, keywords, etc. scenarios

### Continuous Monitoring & Optimization leading to better performance

**Intelligently monitors KPIs like eCPC, PPD** etc to react to market dynamics and react

**Underperforming campaigns are stopped to save budget and reuse later**, or create better campaigns



## Benefits realized by a F500 CPG

**Improvement in search rank** leads to better visibility of products, translating to higher organic sales

**25% cost savings** due to the optimization of non-performing campaigns

**Marketing budget optimization** with a higher return on the estimated spend

**2 weeks** for the integration of a new brand - scalability realized



# Engagement Models

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# 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

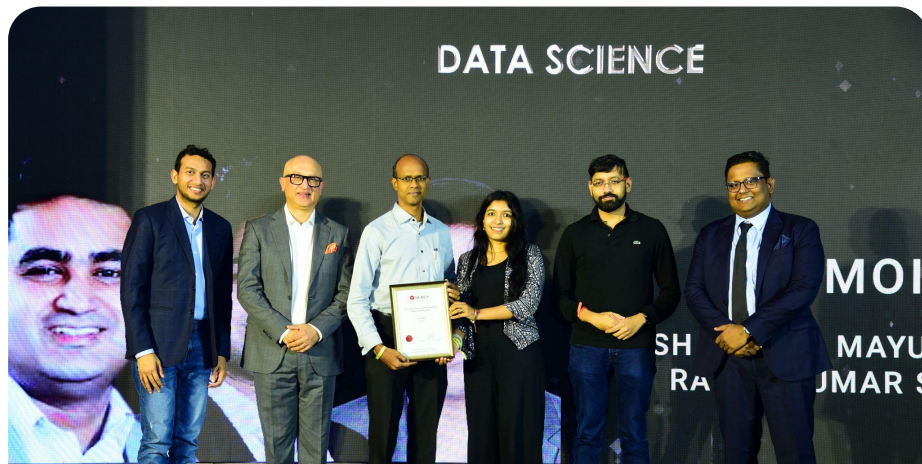
# Thank you



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Website: [www.sigmoid.com](http://www.sigmoid.com)



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

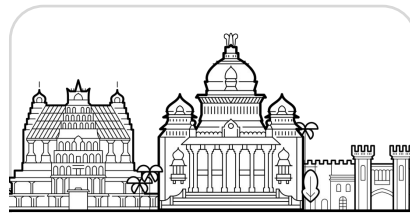
**Global presence:**



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



**EU** (Amsterdam,  
London)



**India**  
(Bengaluru)



**LATAM** (Lima)