

AEROSPIKE USER SUMMIT 2018

AEROSPIKE

# Exponential Growth Without Sacrificing Platform Speed

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**CMOs are on  
the ropes**

# B2B Marketing Engine on Steroids, Always Learning

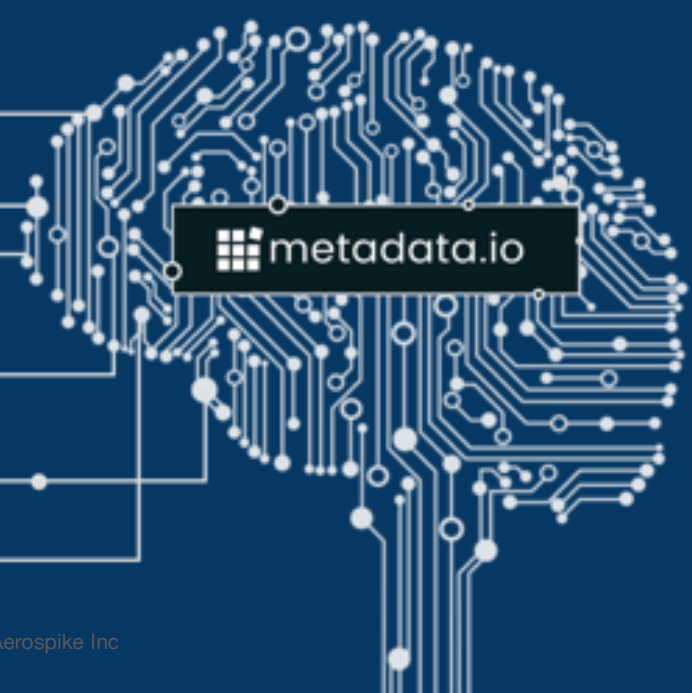
## CONNECT & OPERATE:

100's of marketing technologies



## AI DETERMINES:

What worked before  
Who to target  
Where to target  
What to target  
When to target



## OUTPUT:

Thousands of targeted campaigns (experiments) deployed



# The Problem

## Context

- Relied on traditional SQL database
- Needed for Lookalikes and ICP's
- Sufficient for our needs at that time

## Problem Statement

- More customers needed more custom audiences
- Data not quickly searchable and retrievable in large quantity
- Experienced inconsistencies and downtime

# Challenges Deep-Dive

## Challenge 1

### Speed

High latencies in read/write throughput, including full text search

## Challenge 2

### Predictability & Stability

Downtimes and inconsistencies, leading to unexpected results

## Challenge 3

### Scale

Limited and restricted to only few audiences to be generated

# Solution

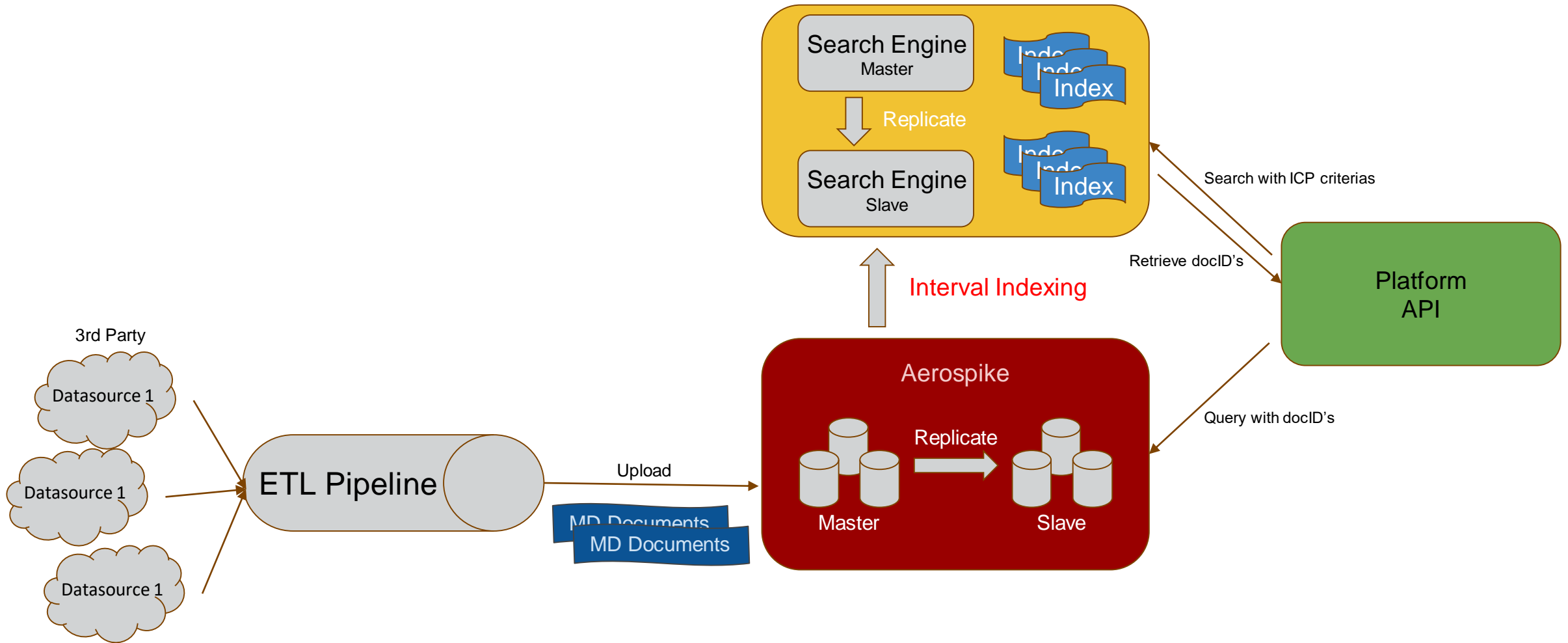


# Solution

## Aerospike database clusters

1. Broadened capabilities and helped support our company's exponential growth.
2. Boosted Profiling/Audience Lookalikes algorithms to over 5X the speed
3. Enabled us to serve more customers in a shorter amount of time with even leaner hardware resources

# Implementation & Architecture





# Configuration

- 1) Production ready - 1 main cluster of 3 nodes + 1 replica
- 2) 3 different environments (dev, stage, production)
- 3) Auto-backup
- 4) Auto-logging
- 5) Aerospike Management Console

DevOps Cost: \$0

# Performance

- Handle significantly higher QPS: at least 5 times faster
- Current storage up to 500GB of data with monthly fluctuation
- Uptime for Aerospike at 99.99%

# Integration - Making the Switch

## Platform

Spring Data works seamlessly with our current platform

## ETL

Python library enables ETL layer

## Encryption

The flexibility of encryption (entire disk or singular field of a document)

# Future Approach

- Integrate with more 3rd party datasources
- Generate even more Lookalikes and ICP's for our growing customer base
- Move future campaign experiments and optimizations to Aerospike

# Higher Speed, Greater Load, More Reliable

5X  
Speed

