

The background features a vibrant blue gradient with subtle, wavy horizontal lines. In the bottom right corner, there is a colorful abstract shape with shades of purple, pink, and orange. The AWS logo is positioned on the left side of the main text.

aws SUMMIT

INDIA | MAY 25, 2023

ISV003

How MongoDB enables your end-to-end data lifecycle

Himanshumali

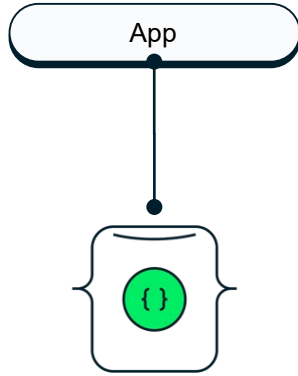
Principal Solutions Architect,
MongoDB



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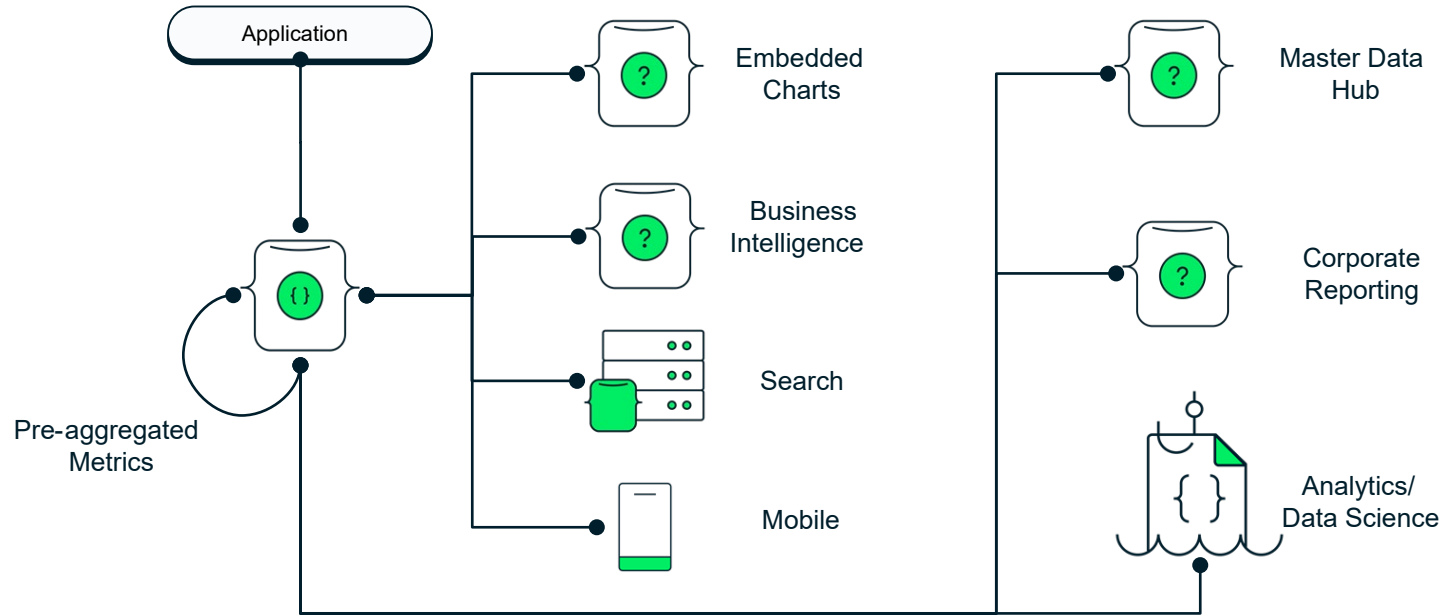


Data strategy is easy with 1 workload





Can easily become a web of data pipelines



Agenda

- Challenges today
- Where MongoDB can help
- Benefits
- Wrap-up

Challenges today



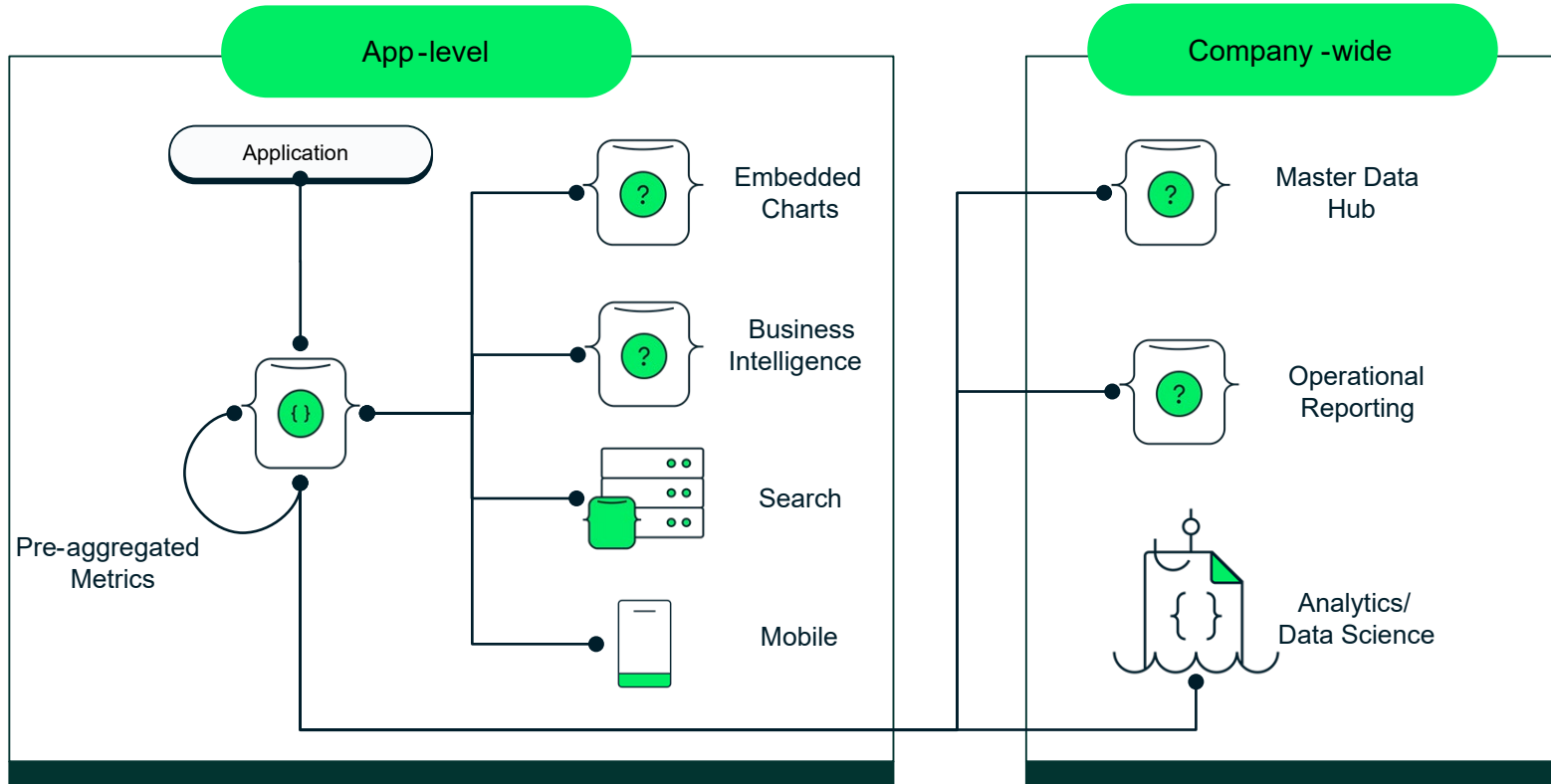


MongoDB report on data and innovation

- 81% of respondents believe regularly building new, innovative applications and features is crucial to the long-term success
- Only 27% of technology professionals' time is spent on new products and features and equal amount of time on maintenance of systems
- 63% of respondents described their organization's data architecture as complex
- 73% of respondents said working with data was the hardest part of building applications



Both app-level & company-wide challenges





Each arrow + icon can bring a lot of work!

Education

Learning another product
and its best practices

Management

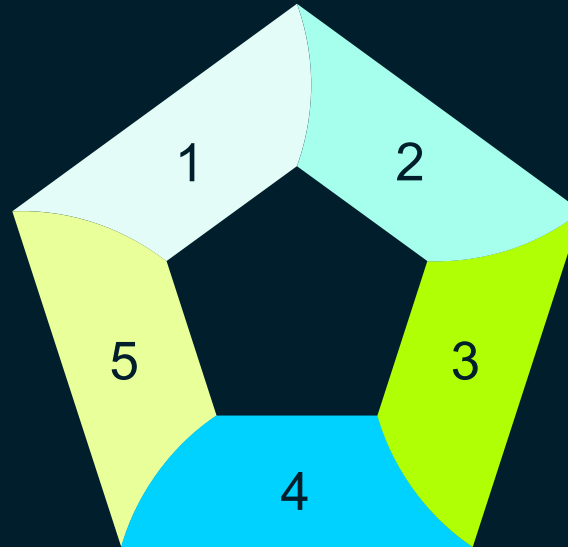
Configuration and
ongoing management

Data consistency

Challenges of consistency,
lineage, time across
sources

Data pipelines

Transforming and
aggregating



Non-functional reqs

Different scaling, HA,
security per product

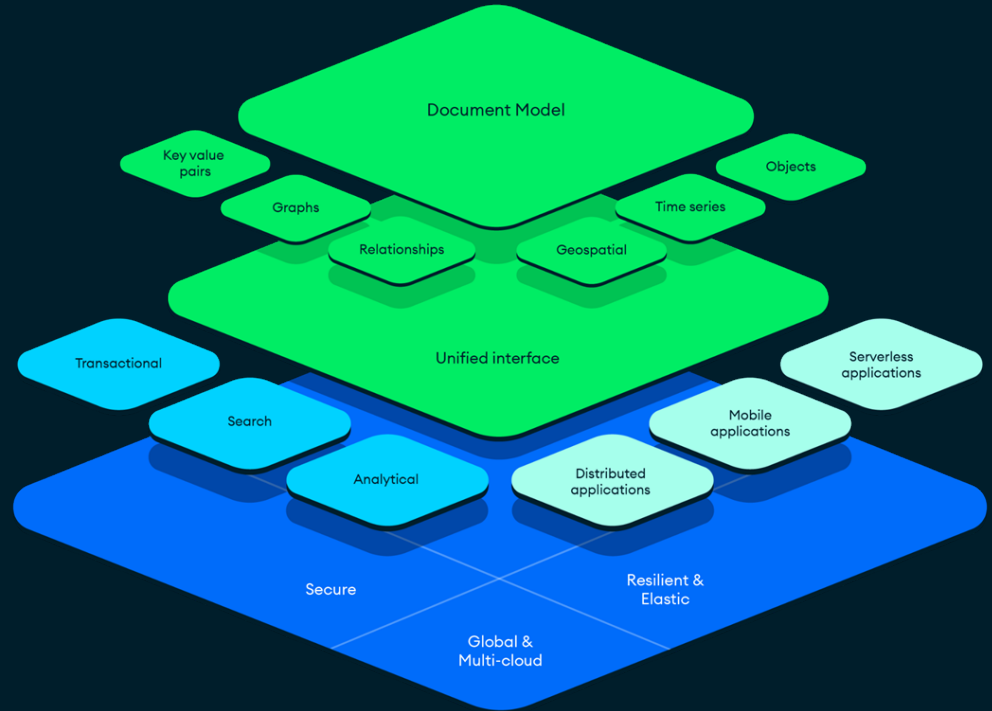


Where does MongoDB help



Accelerate innovation with

One interface.
For any application.
Anywhere.



App-level workloads



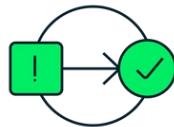


3 approaches to pre-aggregated metrics



Double -write

Tightly couples the app
action with the
aggregates



Event-based Trigger

Atlas Trigger or change
stream with \$merge
enables async counts

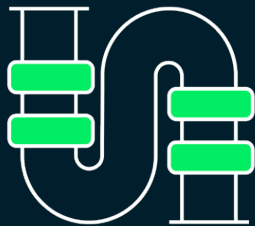


Periodic trigger

If there can be a delay,
a periodic \$merge can
save DB resources

METRICS

Features to take advantage of



Atlas triggers & change streams



Materialized views (\$merge)



Columnar indexes



Time series collections



Atlas Charts built for MDB-backed apps

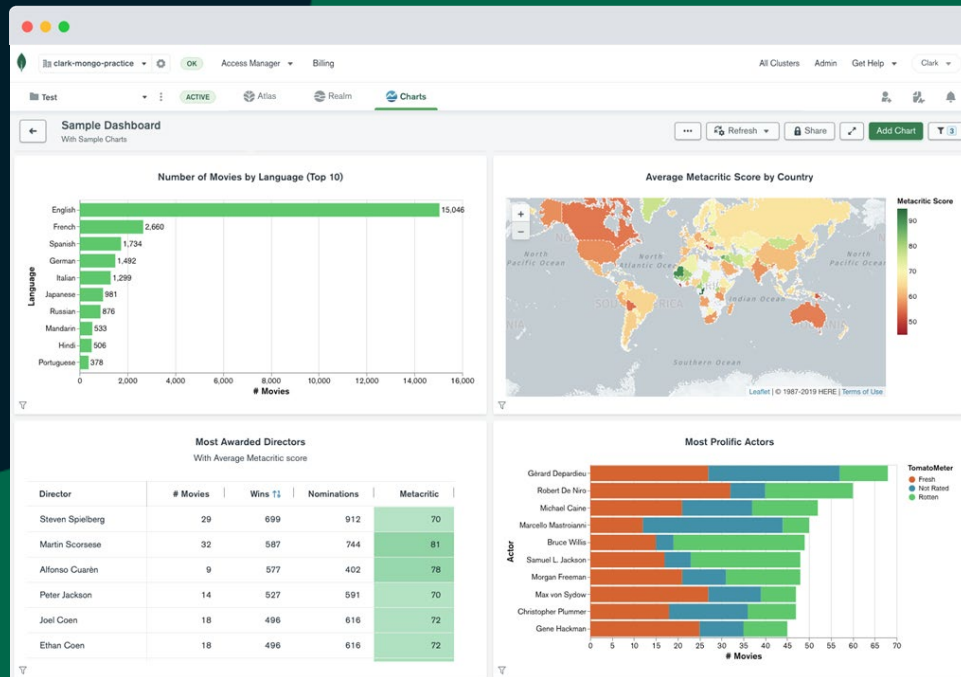
Natively supports document model

Managed service in Atlas, separate resources from electable DB nodes

Visualization builder & best practices built -in

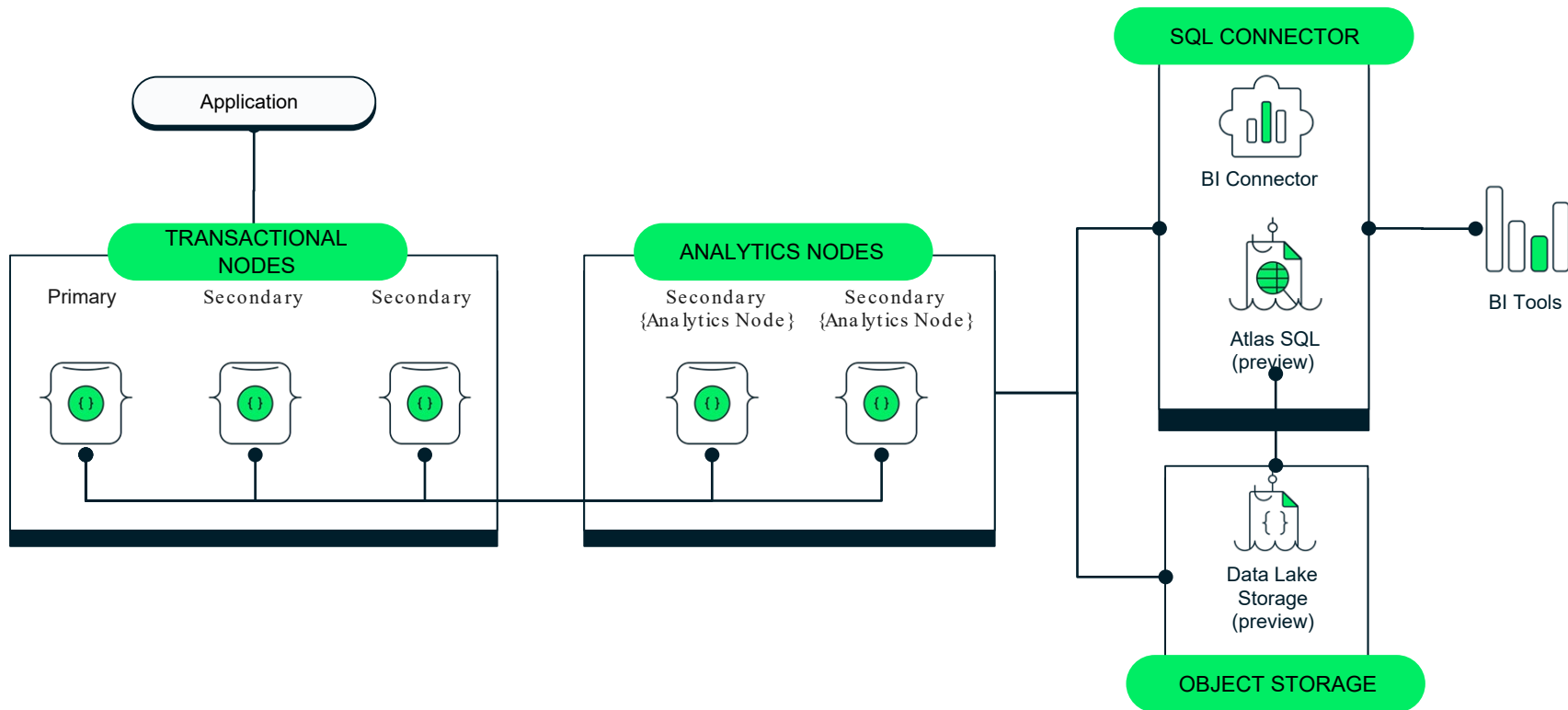
Queries optimized for MongoDB

Embeddable with iFrame or SDK





Live BI queries isolated from app load



Search so important to engage users

The image shows a screenshot of the Yelp website with several features highlighted by green boxes and arrows, illustrating search and engagement strategies:

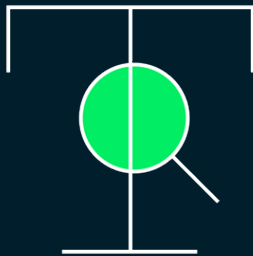
- Facets:** Points to the left sidebar containing filters for price, suggested options, category, and features.
- Fuzzy matching:** Points to a dropdown menu showing suggestions like "thia food", "Thai Food", "Thai Food Delivery", and "Best Thai Food" based on the input "thia food".
- Autocomplete:** Points to the search bar area.
- Geo search:** Points to a map on the right side of the page showing a location in New York with numbered markers.
- Sponsored Results:** Points to a highlighted result for "Bangkok Avenue" at the top of the main content area.
- Custom scoring:** Points to the "Sort: Recommended" dropdown menu.
- Highlighting:** Points to the word "food" in a user review snippet: "the food was fantastic My food was ready when I went to..."

The main content area displays a search result for "Bangkok Avenue" in Queens, NY, including a photo of a dish, a star rating of 4.5 (140 reviews), and a "Start Order" button. The map on the right shows a location in New York with numbered markers (1-10) and a callout box that says "Expand the map to get a better look at the businesses near you."



APP SEARCH

Features to take advantage of



Atlas Search offers the features needed to fine-tune your search results to help users find what they need, including:

- Fuzzy search
- Autocomplete
- Filters and facets
- Synonyms
- Multi-data type support
- Multi-language support
- Highlighting
- Custom scoring
- Rich query language
- Facets



APP SEARCH

Might consider another product



Combining with
data outside MDB



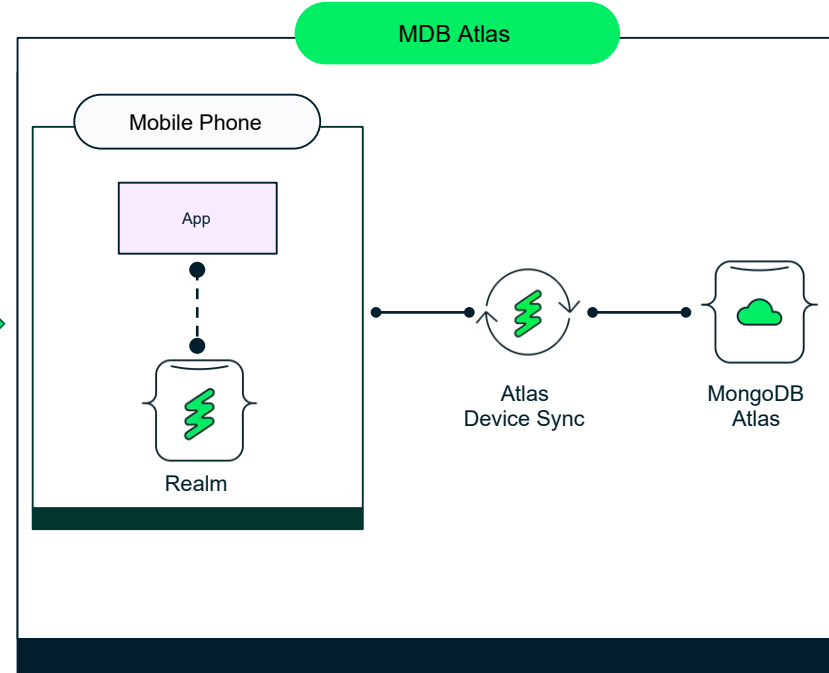
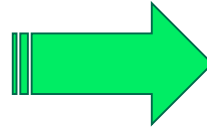
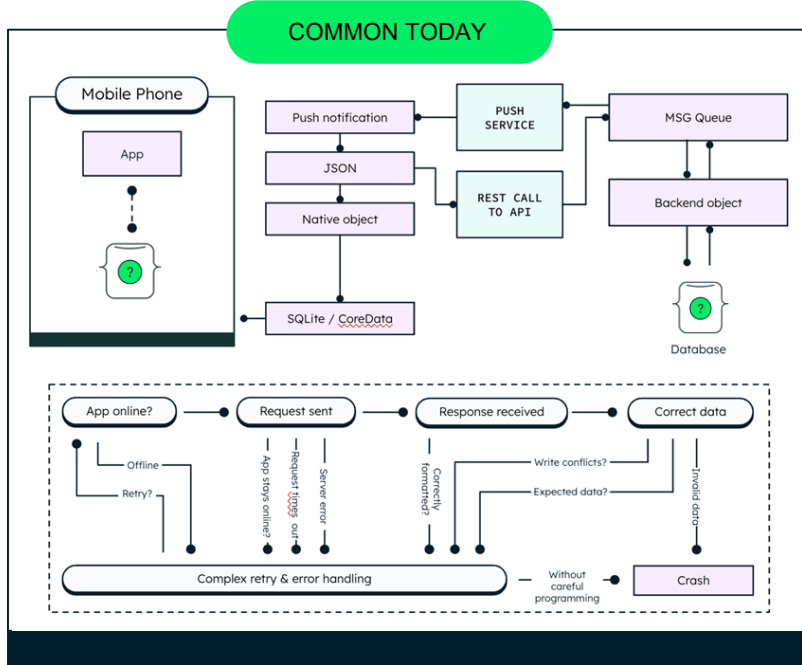
Beyond app
search (e.g. logs)



OOTB UI for Biz
Users



Realm with Sync can make mobile effortless



MOBILE & SYNC

Features to take advantage of



Live objects



Cross-platform



Real-time 2-way
query-based sync



Automatic
conflict resolution



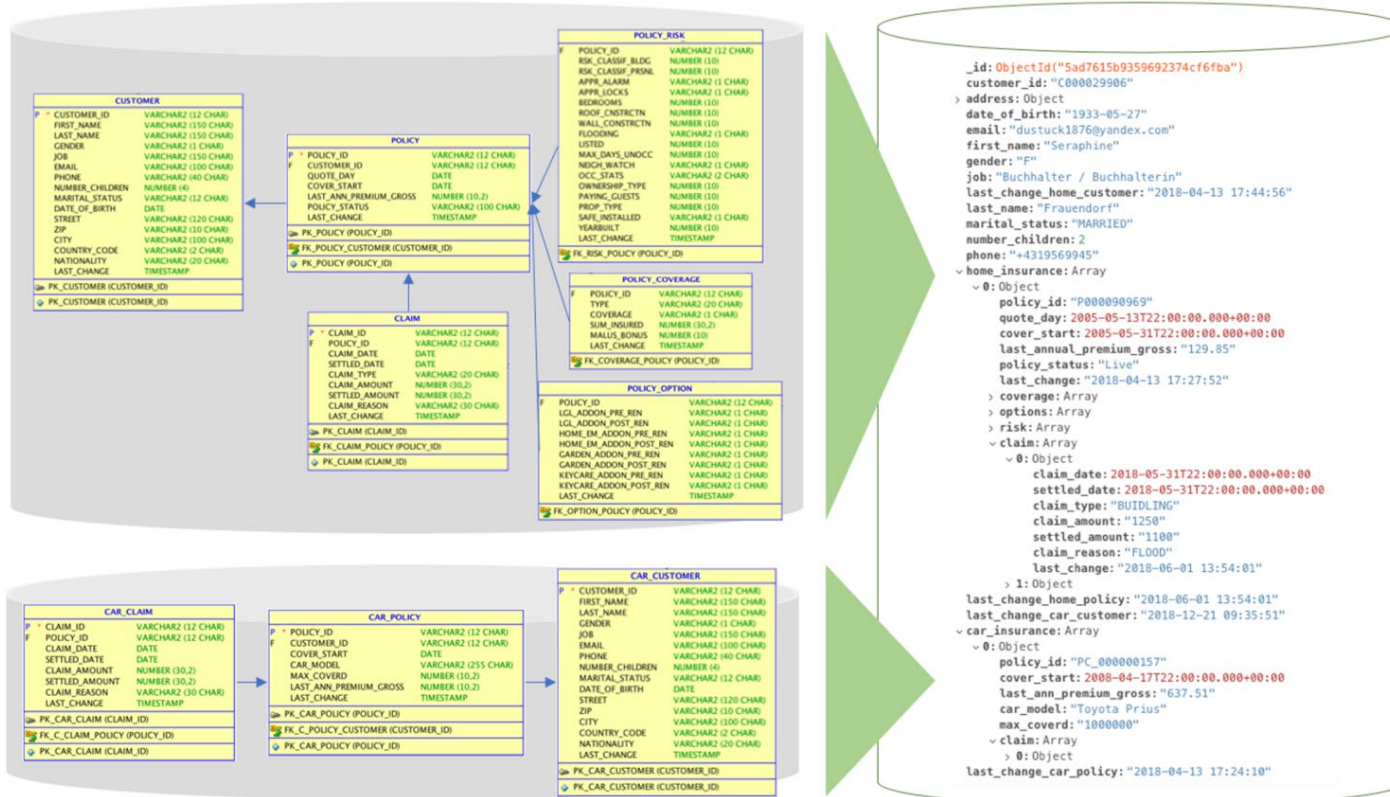
Built for mobile
(Min battery & network usage)



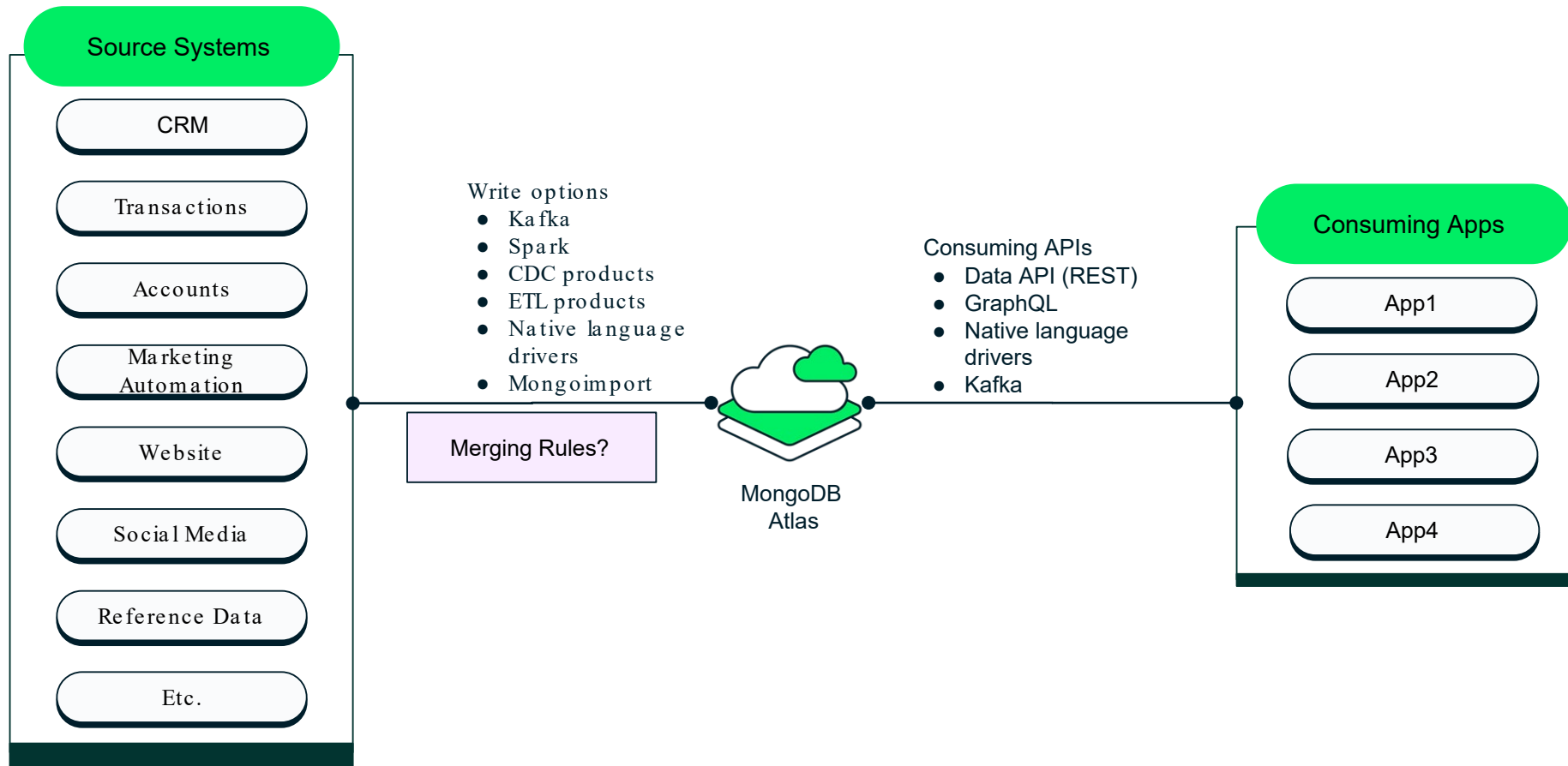
Company-level workloads



Document model perfect for master data hub



Many options for ingesting and consuming master data



MASTER DATA
HUB

Features to take advantage of



Dynamic schema



Unlimited scale



Multiple standard
APIs/ languages



Atlas components

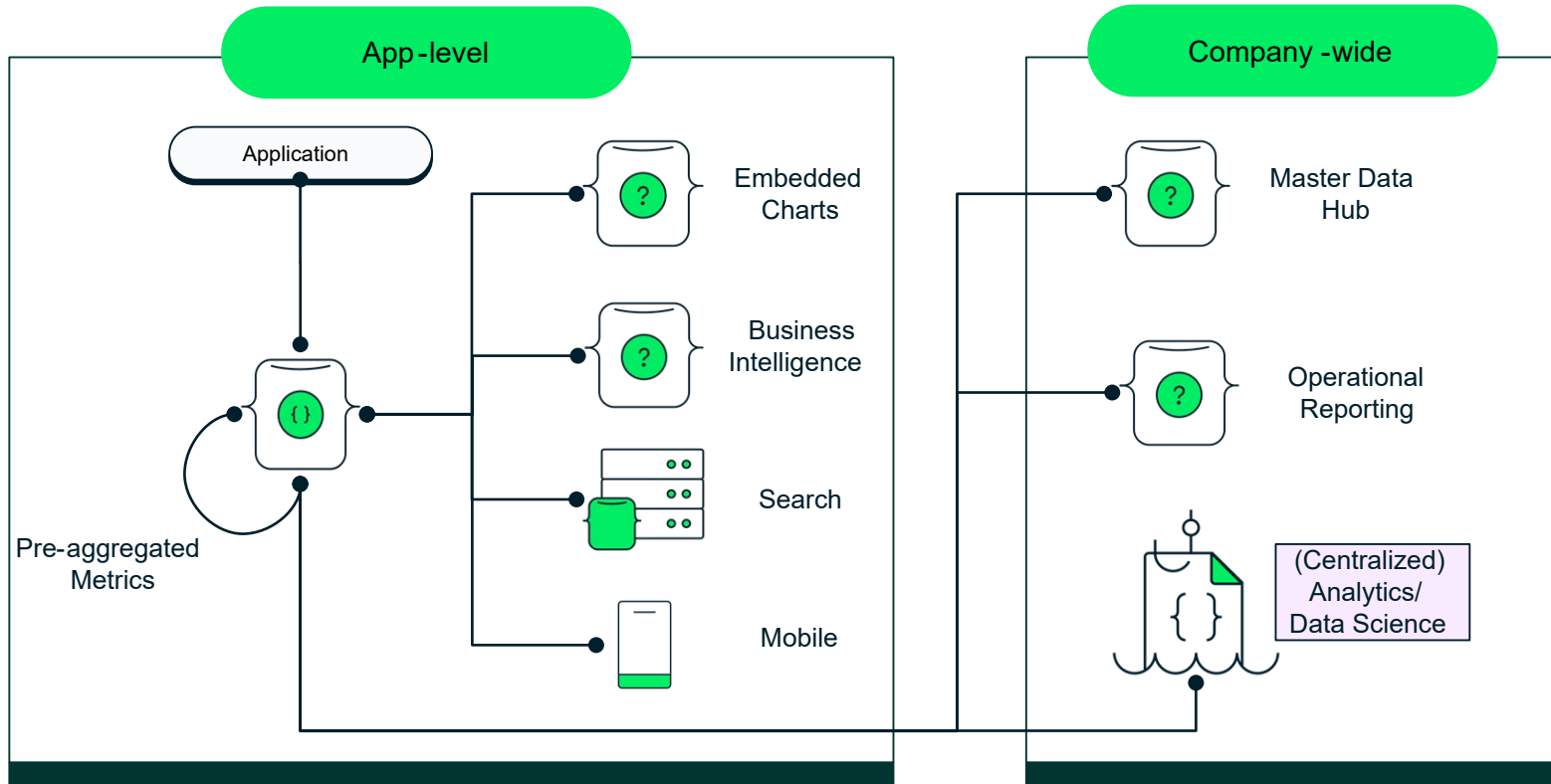


JSON schema for
governance

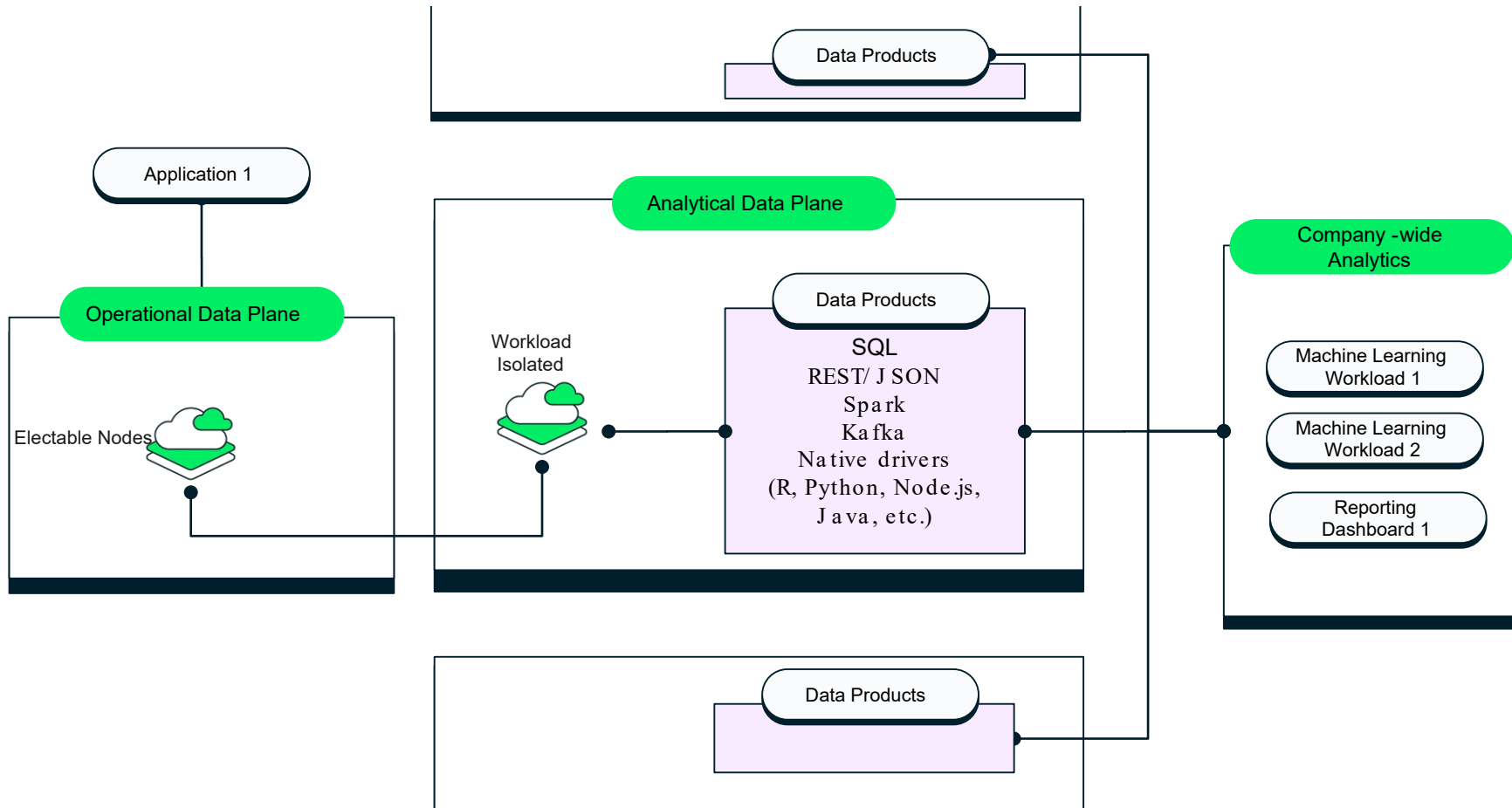




Historically, analytics have been centralized

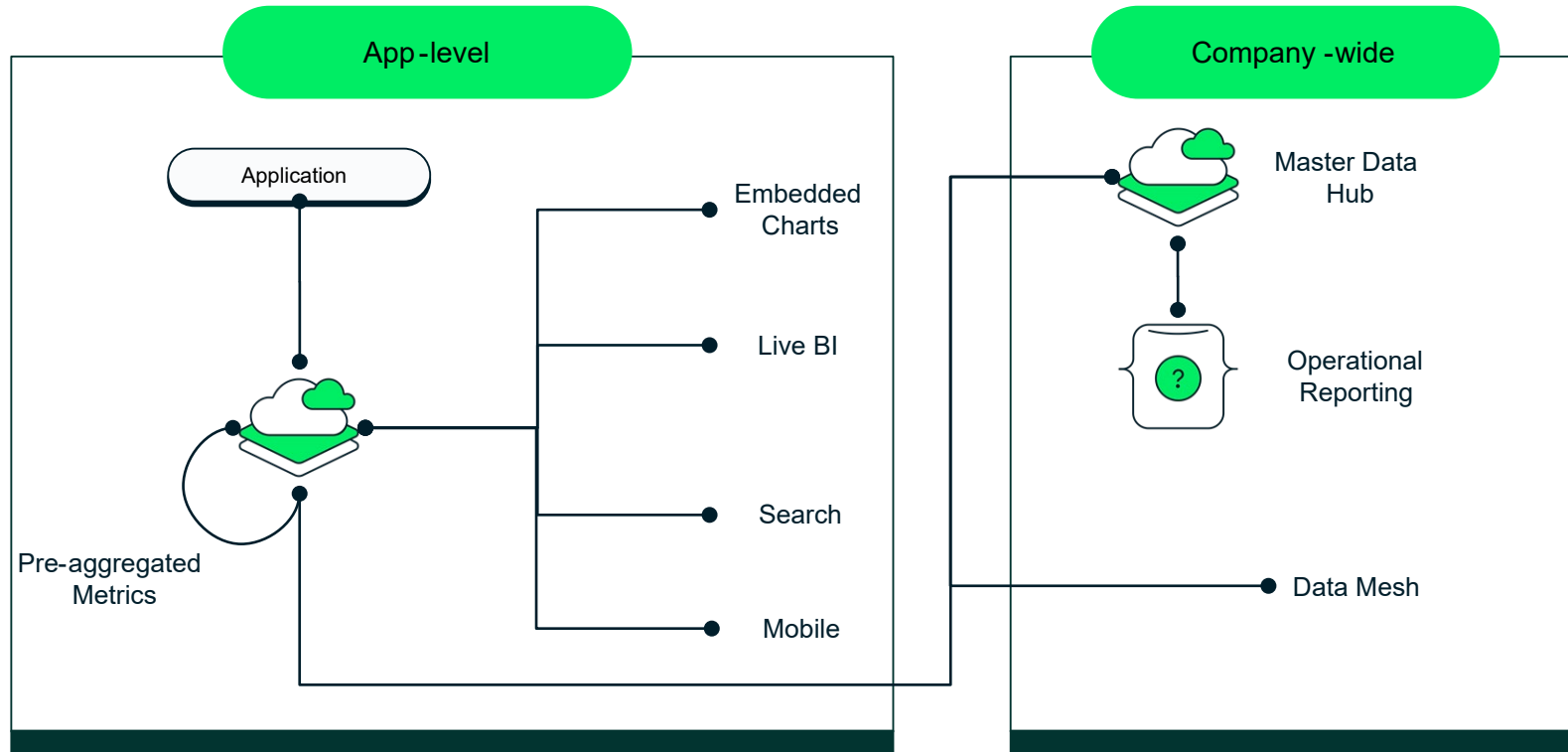


MDB well suited for the decentralized Data Mesh trend





...into automated synchronization

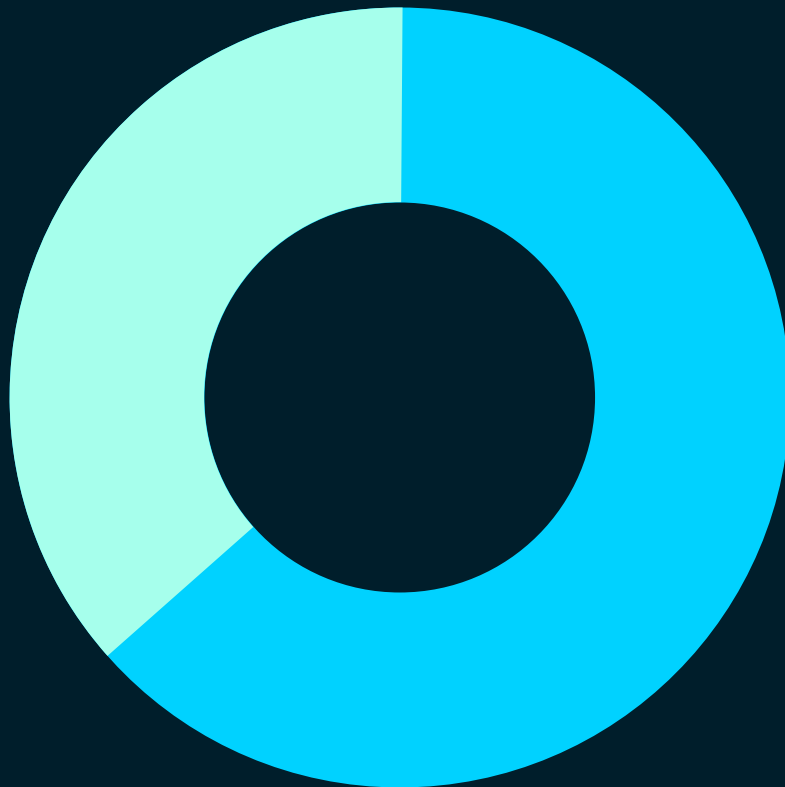




PRODUCTIVITY

Dev Effort

How much effort could you save by automating all that application glue code you work on?



■ Glue Effort
■ Adding Features

Thank you!

Himanshumali

Principal Solutions Architect
MongoDB



Please complete the
session survey

