

MONGODB CASE STUDY

## Veerum, Inc.

### Introduction

This case study of VEERUM, Inc. is based on a July 2022 survey of MongoDB customers by TechValidate, a 3rd-party research service.

"Ultimately MongoDB plus VEERUM equals 'a new visual way of doing work' that is creating incredible efficiencies and gains for our clients. It's unique in the world.

I highly recommend MongoDB to others who are looking for a high scale and flexible DB solution."

# Challenges

The business challenges that led VEERUM to evaluate and ultimately select MongoDB:

- Their main objective when selecting MongoDB was: Launching their new application on MongoDB
- VEERUM was looking for a flexible, cloud hosted database that could auto scale in unison with their business and client needs.
- VEERUM handles some of the largest and most complex data sets in the world, ranging from 3D reality scans, drone imagery and 360 panoramic imagery to CAD and engineering data to business system data such as documents, metadata, work orders, schedules, charts, and much more. The types of data sets need to be aggregated, organized, and searchable across a single user interface. This needs to be done at massive scale. There could be billions of data points in a single data set, that they themselves are then related to millions of business information system data points. And the types of data and relationships of those data items are ever changing.
- "This created a huge problem for us to overcome: how do we support all of those needs at scale, efficiently, without being overwhelmed from a DB administration perspective? The answer was and still is, MongoDB Atlas!"

# **Use Case**

The key features and functionalities of MongoDB that VEERUM uses:

- Brief overview:
  - "MongoDB is used as our primary DB for our 3D visualization and intelligence SaaS offering. It powers the backend of our web application which is used by many of the leading industrial and energy companies in the world. VEERUM's digital twin allows clients to 'be on site without going to site,' which means they can remotely visit a 3D replica of their physical industrial asset from the safety of their home or office."
- workforce to work safely from anywhere. VEERUM allows them to do so by aggregating all of their disconnected geospatial and business information data sets and contextualizing them with the reality of their current site conditions. MongoDB powers all of that!" "We use MongoDB's flexible and scalable cloud database to store the

"In today's 'new normal' it's critical for our clients to enable their

- aggregate data and all related relationships and data structures. Atlas Search is leveraged to index and query data across a wide variety of data sources. Facets in Altas Search allow us to quickly build amazing user experiences by offering easy to use filters on large search result sets. Facets enable our clients to find the exact data they want, fast. We also use Atlas Charts to gain insights into platform statistics and to monitor and improve key business and client KPIs and outcomes." The reason they chose MongoDB was:
- Flexible document data model
  - Ease of use Fully-managed cloud database

  - Advanced security configurations
  - The products in use include:

Search and indexing

- Atlas Database
- Atlas Search The cloud provider currently in use is:

Atlas Charts

- AWS
  - The use cases that is relevant to how VEERUM uses MongoDB are:
- Al and Machine Learning (ML) Analytics & Operational Intelligence including Realtime
  - Business Agility
  - Catalog
  - Internet of Things (IoT) Mobile & Mobile Apps
  - Single View
- Results

3D geospatial, mapping and GIS. Data aggregation and indexing.

#### Using Atlas, VEERUM has been able to scale their SaaS offering with a lean team of backend developers and DB administrators based upon their high platform usage and amount of big data stored. Indexing and

The surveyed company achieved the following results with MongoDB:

writing complex and performant queries. VEERUM has also developed new user experiences as new features are launched by the MongoDB team. "We really benefit from the fast moving roadmap that is delivered via a cloud hosted DB offering."

querying capabilities are very extensive and accelerate developer time in

- "Since MongoDB also rounds out their offering with related features and functions that go above and beyond traditional DB solutions (e.g. Charts, Search, APIs, etc) we've been able to keep all of our backend DB storage and related backend data services within one offering which minimizes data duplication and costs."
- "To enable immersive digital twin type user experiences, VEERUM leverages MongoDB for 3D geospatial storage and queries, allowing end users to simply click on any given location in 3D space and instantly return any information related to that location. We then combine that bleeding edge UX with traditional 'advanced search' types of user interfaces to ensure clients can guickly find the information they need at
- massive scale within incredibly low response times." "VEERUM was an early access member for new Atlas Search features and have been using Atlas Search extensively to index millions of
- aggregate data points that are drawn from a large number of independent 3rd party solutions, each with their own data models and fields. Atlas Search allows us to quickly return the specific data that clients want, quickly, accurately and in 3D." "Ultimately MongoDB plus VEERUM equals 'a new visual way of doing
- unique in the world. No one is doing this in a web first, web native, single web application."

and flexible DB solution."

work' that is creating incredible efficiencies and gains for our clients. It's

"I highly recommend MongoDB to others who are looking for a high scale

Company Profile

Company: VEERUM, Inc.

Company Size: **Small Business** 

Industry: Computer Software

## About MongoDB

MongoDB is the leading modern, general purpose database platform, designed to unleash the power of software and data for developers and the applications they build. Headquartered in New York, MongoDB has more than 26.800 customers in over 100 countries. The MongoDB database platform has been downloaded over 175 million times and there have been more than 1.5 million registrations for MongoDB University courses.

Learn More: **☑** MongoDB Source: ROB SOUTHON, Chief Technology Officer, VEERUM, Inc.

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Research by **TechValidate**by SurveyMonkey