# CASE STUDY
## COX AUTOMOTIVE DELIVERS ENHANCED CUSTOMER EXPERIENCE WHILE REDUCING COST WITH MONGODB

# COX AUTOMOTIVE™

*Rivet Logic helps Cox Automotive achieve a Single View of previously siloed data through a modern MongoDB based enterprise data hub, reducing operational inefficiencies while creating a platform for future innovation.*

## ORGANIZATION

Cox Automotive, a subsidiary of Cox Enterprises, is the world's leading provider of products and services spanning the automotive ecosystem. Uniting over 20 brands serving customers such as auto dealers, manufacturers and financial institutions, Cox Automotive provides an end-to-end solution to transform the way people buy and sell cars. Cox Automotive is partnered with over 40,000 dealers, as well as most major automobile manufacturers, and touch over 67 percent of all car buyers in the U.S.

## CHALLENGE

From vehicle acquisition to ongoing customer service, Cox Automotive prides itself in providing the necessary resources and tools, such as Autotrader and Kelley Blue Book, for its customers to maximize value at every step of the car buying and selling process. However, each of Cox Automotive's six business units maintained their own databases and business requirements around what data needs to be captured and stored around a vehicle record.

The siloed databases and inconsistent data structures meant obtaining a "single view" of a vehicle was impossible, resulting in IT inefficiencies and making operational expenses associated with data maintenance and reporting extremely high.

Cox Automotive embarked on an initiative to build a Vehicle Hub, with the goal of creating an information delivery platform that integrates strategic information assets that enable innovation of products and services unachievable by industry competitors.

With the project, Cox Automotive hoped to achieve the following business objectives:

• Customer Value - Provide "Best in Industry" vehicle matching ability.

• Consumer Experience - Provide "Best in Industry" vehicle detail and information.

• Reduce Cost - Reduce operating expense and operational support through the Vehicle Hub.

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- Build for the Future - Build enterprise capabilities to accelerate future development.

- Lead the Market - Data Hub supporting advanced analytics, market knowledge and insights.

# SOLUTION

For the Vehicle Hub to be a success, Cox Automotive needed a flexible database that could aggregate data from its various business units into a central repository to create a Single View. They chose MongoDB for its rich and flexible data model that allows handling of highly diverse data types, and more importantly, the ability for the database to evolve with business requirements. In addition, MongoDB is built with high availability and scalability in mind, so applications are managed more efficiently at scale.

Cox Automotive chose Rivet Logic, a trusted MongoDB partner with deep expertise building a variety of data services solutions, to implement the Vehicle Hub. Knowing that the Vehicle Hub wasn't just a short-term fix, but a long-term enterprise solution to support continuous innovation as business requirements evolve, Rivet Logic performed a long-view solution conceptualization to ensure an ideal architecture was developed to support future growth.

Rivet Logic worked collaboratively with the Cox Automotive team to determine a desired project approach,

build the necessary requirements to successfully meet business goals, and define a flexible data model that works well with large unstructured data sets. Existing data from each business unit then went through the proper transformations and were loaded into the data hub through an automated process.

# RESULTS

The new Vehicle Hub now provides a Single View of any vehicle record, creating a seamless experience across all of Cox Automotive's business units. Departments that were historically siloed now have the ability to collaborate and share insights with each other, resulting in faster time-to-market. Consolidating all the data has also led to dramatic reductions in IT inefficiencies and point-to-point data integrations, along with reduced operational expenses from data maintenance and reporting.

In addition, the improved data quality also translates to a better overall customer experience by enabling users to make informed decisions through more accurate vehicle information. Furthermore, the solution's support of advanced analytics means analysts can now access what they need to easily discover new insights, allowing them to identify innovative new products and services, and helping to reinforce Cox Automotive as a market leader.

# COX AUTOMOTIVE ARCHITECTURE



**SILOED BUSINESS UNIT DATABASES**

Business Unit DB  Business Unit DB  ...

**BUSINESS UNITS**

Business Unit  Business Unit  ...

Data Transformation

**VEHICLE HUB**

API Layer

MongoDB