

## Pedal to the floor

How Kia America built a world-class safety analytics capacity in 18 months with SAS and Deloitte



Manufacturers are held to high standards when it comes to safety monitoring, both on the factory floor and once the product is in the hands of the customer. That is especially true for car manufacturers, which are not only subject to a host of rigorous safety regulations, but build their brand reputations on the safety of their automobiles. Their safety procedures affect compliance, automobile ratings and rankings, sales – and the lives of their customers.

For all those reasons, Kia wanted to build an advanced data analytics program, and turned to SAS and Deloitte for help.

### A central repository for large volumes of safety data

Manufacturers like Kia must grapple with many different data inputs into their safety monitoring processes. This includes data from internal and external sources ranging from technician hotlines, warranty services, consumer affairs, dealer management systems, US National Highway Traffic Safety Administration (NHTSA) vehicle owner questionnaires, and more. This data contained insights that could allow Kia to quickly identify and remedy safety issues.

When relying on legacy systems, data management and analysis often remain manual activities, requiring time and resources that can be better spent on more valuable analysis and decision making pursuits. Kia wanted to create a single, centralized repository for analyzing all the data in one place.

Kia had invested in many different tools and solutions – commercial, open source and in-house – for managing and analyzing its safety-related data. They wanted to build on that investment and use existing resources and knowledge in moving to a new, centralized platform.

#### **The challenge:**

Bring together the best of Kia's existing resources along with powerful, centralized analytics capabilities ready to handle the complexity of multiple data sources, systems and processes.

### Transformation on the fast track

Kia had an aggressive timeline for transforming its safety analytics capabilities. The company enlisted SAS and Deloitte to help develop and implement its strategy.

SAS started by helping Kia tackle the significant amounts of unstructured data contained in its systems to extract useful information.

#### **The goal:**

Establish a baseline for a solution that would help the company quickly identify safety issues.



Meanwhile, Deloitte engaged with internal influencers and stakeholders at Kia. They wanted to understand the intricacies and interdependencies of the company's safety-related processes across the organization, as well as to begin building consensus for a new approach.

Ultimately, the team landed on an approach that relies on SAS® software and services as the backbone of its infrastructure. Deloitte would bring customized analytics accelerators and provide project management. Deloitte also led the effort to incorporate other Kia resources to capitalize on their strengths and avoid unintended internal competition.

## Results where they matter most

Over the course of only 18 months, these teams successfully implemented an integrated safety alerting, reporting and dashboarding solution that allows Kia to detect automotive vehicle safety issues quickly. The solution includes:

- Integration of 10 different data sources into a single database.
- Advanced text analytics to help identify potential safety-related incidents from customer comments, call center, service technician hotlines, NHTSA vehicle owner questionnaires, and other unstructured data from internal systems.
- Advanced text analytics modeling and alerting to automate the identification and prioritization of alerts across multiple data sources.

- Standardized dashboards to expedite the investigation of potential safety issues.
- Seamless integration between issue alerting, investigation and case management.
- Automation of data and case management tasks, enabling Kia resources to spend more time on higher-value tasks such as investigating issues.

## As a result of this initiative, Kia is already achieving important goals in four areas:

- Ability to detect potential safety issues quickly and accurately.
- Better use of diverse, relevant data and analytics to identify potential safety risks.
- Significant efficiencies in reviewing, investigating and managing potential safety issues.
- Enhanced visibility and management of potential safety issues through updated Systematized Standard Operating Procedures.

Kia's new safety system was singled out for kudos by the NHTSA as a model of safety and risk management.

To learn more, please visit [sas.com/deloitte](https://sas.com/deloitte).



**Deloitte.**