Business critical information at a glance

One of the greatest challenges an Automotive Manufacturer faces is obtaining accurate performance data directly from the vehicle in order to assess usage patterns and quality problems. Until now, they had to rely on self-reported data from the vehicle owner in order to resolve issues and to develop new features. Access to business critical information such as the health and situation of a vehicle/fleet of vehicles in real-time helps automotive manufacturers, suppliers, dealers and individuals make informed decisions and formulate effective responses.

Gain real-time, contextual and predictive insights

The Vehicle Analytics Dashboard solution, based on HARMAN Ignite, enables innovative business models by integrating vehicle telematics data and analytic insights with customer and business data. The solution showcases how automakers, dealers and insurance companies can leverage HARMAN Analytics capabilities to gain real-time, contextual and predictive insights on vehicle health, driving behavior, consumer (buying) behavior to drive improvements in the areas of customer experience, product management (Research & Development) and marketing/sales campaigns.

HARMAN Vehicle Analytics Dashboard provides a comprehensive suite of vehicle analysis tools that are broadly divided into two main dashboard portals. The underlying data set can be utilized from the HARMAN solution, or adapted to a customer’s own data cloud.

**Micro-Analytics Portal** – This dashboard includes a view of an individual vehicle for a single day and typically used for causal analysis of an issue. All events collected are presented in an intuitive, time-aligned chart that provides an understanding of cause and effect relationships and helps diagnose issues rapidly.

**Macro-Analytics Portals** – This consists of individual, specialized reports that are broken into multiple usage domains (Product Management, Quality, HMI Optimization and more). Each of these domains have a focused set of data presentations that allow a user to view data across a selection of vehicles. Trend charts and other custom visuals are provided for each tool, and typically are used to tell "what" is happening across a specific interest area of the vehicle (quality, product roadmap, industry trends and etc.).

Top-line Benefits

- Conducts analysis based on real-time sensor data
- Provides analytics, insights and forecasts to improve vehicle performance
- Increases speed to market through predefined dashboards
- Collects, maps, and stores sensor data from any managed device, vehicle or equipment
- Permits the creation, execution and visualization of business-specific scenarios using a robust and scalable development platform
- Runs real-time evaluations and predictions on vehicle, fleet, context, and business data

Why HARMAN?

**Shortening Time-to-Market**
Shorten your time from concept to delivery using our best practices, turn-key delivery models and rich talent pool.

**Cross-platform**
Take advantage of our experience in multiple industry verticals and leading platforms to rapidly exploit new market opportunities.

**Global delivery footprint**
Our skilled, talented engineers deliver solutions to companies like yours from centers throughout the world.

**Solution accelerators**
Get access to leading edge innovation and best practice by using our solution accelerators and global pool of partnerships.

www.harman.com

©2018 HARMAN INTERNATIONAL INDUSTRIES, INCORPORATED
This document is for informational purposes only. All rights reserved.
## Features and Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud platform portability</td>
<td>Flexible Implementation to run in multiple OEM Environments (AWS, Azure, On premise)</td>
</tr>
</tbody>
</table>
| PaaS Cloud deployment                        | • Easy to deploy. End users just need Login credentials to get them started using the web-based portal. Access can be uniquely provisioned based on the employee credentials and responsibilities  
• Dashboard tools and reports are continuously updated to increase value to the customer and to support current and future industry issues |
| Focused visualization models targeted to meet Automotive needs | • Predefined options for building individual connected vehicle/fleet scenarios  
• Allows visualization of real-time data according to business needs with modern user interface technology  
• Intuitive interface to navigate and easily identify and monitor issues. This helps predict problems in real-time so necessary action can be taken. |
| Enhanced Analytics guidance                  | • Enhanced Analysis Tools to give guided insight to the anomalies and the trends. The tools also help in identifying the root causes behind the anomalies/issue trends.  
• Encompasses advanced analytic and predictive capabilities using structured and unstructured data |
| Centralized platform for Data management      | Consistent approach to normalizing data sets, that allows for seamless expansion of new vehicle models over time and across different model lines |
| Reduces costs                                | • The dashboards are deployed in a SaaS model and can be accessed with a username and password. – No need for huge capital investments  
• Reduces costs through improved operating, process planning, and control efficiency  
• Requires minimal IT involvement and no disruption to existing systems |

## Partner with an industry expert

HARMAN (harman.com) designs and engineers connected products and solutions for automakers, consumers, and enterprises worldwide, including connected car systems, audio and visual products, enterprise automation solutions; and services supporting the Internet of Things. With leading brands including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon®, Mark Levinson® and Revel®, HARMAN is admired by audiophiles, musicians and the entertainment venues where they perform around the world. More than 50 million automobiles on the road today are equipped with HARMAN audio and connected car systems. Our software services power billions of mobile devices and systems that are connected, integrated and secure across all platforms, from work and home to car and mobile. HARMAN has a workforce of approximately 30,000 people across the Americas, Europe, and Asia. In March 2017, HARMAN became a wholly-owned subsidiary of Samsung Electronics Co., Ltd.

Visit our website at [harmanconnected.services/vehicle-analytics-dashboard](http://harmanconnected.services/vehicle-analytics-dashboard)