



ADVENT OF CONNECTED CARS CALLS FOR CONNECTED WORKSHOPS

Connectivity is one of the key buzzwords in the automotive industry today. The advent of connected cars means that workshops which service and repair such cars also need to ramp up their equipment. Cars made by most manufacturers today come with control devices that continually keep tabs on driving data and information regarding the operating status in addition to recording any wear and tear and stress on the different components of vehicles. It is predicted that there will be as 470 million connected vehicles on the roads in the world by 2025. Thus, it is only natural that workshops in the future should be fully capable of catering to the needs of connected vehicles, as this is what customers would expect.

There is every possibility that the workshop of the future would be 'aware' of the state of customers' vehicles and the staff there would have the expertise to make recommendations to make repairs on a pro-active basis even before components fail or breakdown. The use of such predictive diagnostics to facilitate vehicle-specific forecasts of the component and system conditions can significantly help to optimize planning of maintenance tasks. This functionality is particularly useful for fleet managers who deal with a higher volume of vehicles. By using diagnostic tools to predict system and component failure, drivers and fleet managers can keep track of the current and projected future condition of their vehicles, and prepare in advance for any work that needs to be scheduled.

From the viewpoint of a service center, the technical team would have access to a vehicle's history including data related to former repairs and insights into the status of the components and systems. Availability of such information makes it possible to adapt maintenance appointments based on the condition of individual vehicles and accurately calculate the remaining lifespan on parts. It is also possible to test components remotely through telematics prior to the arrival of the vehicle and thus make the most of the time spent within the workshop.

The use of such advanced technological features will not only reduce breakdowns and waiting times and maximize the floorspace and manpower of the workshop, but will also make it possible for the customer to enjoy a more transparent retail experience with information that is available to them readily.

At Bosch, the customer gets information as to when maintenance is due and in the event that the customer decides to accept the recommendation, he receives a call from the Service Center to schedule an appointment at the workshop. New technologies like Augmented Reality (AR) will make even complex repair tasks easier for the mechanics at the workshop, helping to save time by up to 15 percent on average. Bosch has developed an AR application for the first direct contact with the customer, which provides a quick overview of the customer vehicle's technical condition. A mechatronics' tablet computer or smart glasses can show error codes and other irregularities, allowing the service agent to discuss the results with the customer. In case repairs are needed, the next step involves guided instructions which are displayed right onto the tablet or smart glasses.

A network of such interconnected systems workshops will not only prepare the automotive sector for future challenges, but will also significantly boost productivity through minimal duplication and reduce the need for parts to be replaced before their expiry. Securely sharing information on car-usage and customer profiles can allow the service center to deliver better quality of care to customers, right from knowing which customer is arriving to planning parking slots and managing the schedule of the service agent. Periodic health reports and remote diagnostics will be a key differentiator in the workshops of the future, also creating opportunities for collaboration between sales, aftersales and aftermarket parts. Digital touchpoints are converting formerly offline industry touchpoints to support a seamless customer journey.

This article is based on information provided by Kivanc Arman, Vice President for Automotive Aftermarket, Bosch Middle East, Turkey and Iran