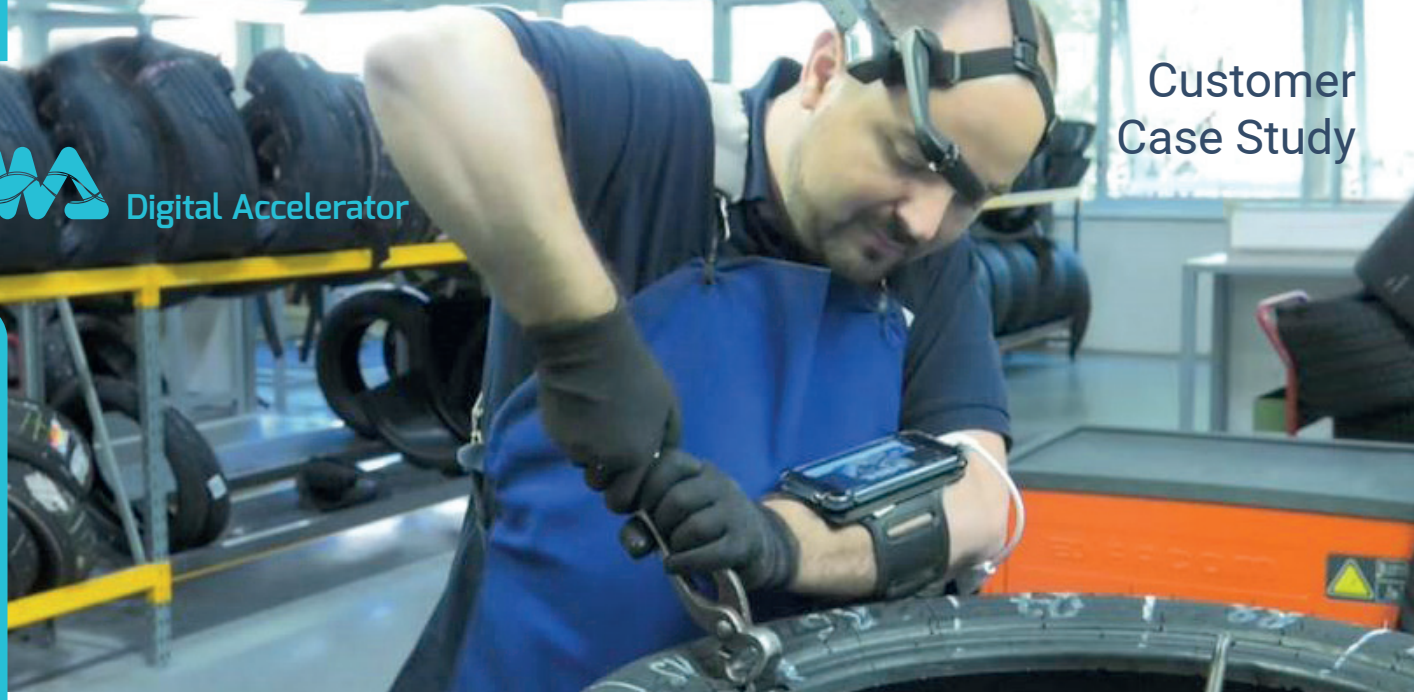
Digital Accelerator

Customer Case Study



AMA unlocks the value of Assisted Reality-enhanced remote support for Michelin

How it all started

Michelin Labs is an incubator for new, innovative technology projects that are easy to deploy and can generate quick wins throughout the company. Each year, 4-5 new ideas are selected to be researched, developed, and implemented within the different departments. One of these ideas was the introduction of remote assistance based on smart glasses to address different use cases like quality control, test follow-up, and training. This is how Michelin contacted AMA and started deploying the XpertEye remote assistance solution throughout the company.

A myriad of possible use cases

1. Quality management

The Research and Development centers of Michelin are charged with **tire autopsy**, i.e. quality inspection of used tires, to continuously improve the way tires are made. Dedicated teams are visiting customers for inspecting and cutting the tires to analyze tire performance like wear, behavior, etc. The competencies related to the **technological know-how of tires rest within the Research Centers** spread over the world and the **manual cutting expertise resides at different specialized workshops** close to customers. AMA's XpertEye Advanced solution, based on RealWear HMT-1 devices, brings those teams closer together. It allows them to **share actionable insights** to make informed decisions when developing new technologies for tires.

2. Use case: Internal field tests

At Michelin, some tests follow-up is divided into two parts. The first one consists **of analyzing the quality of tires** for all sectors (from agriculture to civil engineering, including the equipment of private vehicles). The second part concerns **very specific tests** carried out in areas with special needs such as mining sites for example. On this type of site, the analysis focuses for instance on the adhesion of rocks to tires used in the context of mining activities. Professionals equipped with RealWear HMT-1 dust-tight devices **can share and show the tire wear after different kinds of maneuvers**. These tests are made (between Australian mines and the French research center) before validating the technology and deploying it for customers.

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3. Use case: Heavy truck follow-up

Field engineers are carefully monitoring tire wear of heavy trucks at customer premises. One of their main missions is to **verify the conformity of tire tuning**, like pressure, and analyze tire wear based on for instance the truck driver's behavior. Equipped with light-weight **Vuzix M300 smart glasses and an endoscope**, these field engineers can easily inspect the twin tires at the back of a lorry for example. This allows them to see if the tires are damaged without having to dismantle them and analyze tire behavior directly after a customer run. This information can be shared live with the R&D centers.

4. Use case: Training

To **decongest sites** specialized in specific cutting techniques and in the analysis of certain types of tires (e.g. airplane tires) the use of smart glasses to **train colleagues remotely** has been proven very useful. Since expertise is hard to come by, the expert can show a distant colleague the right technique on how to cut the tire correctly and at the same time verify if his colleague is adopting the right gestures. This can help to avoid the tire being sent for inspection to an already congested site and allows to increase customer satisfaction by providing them an analysis of the tire with improved lead times.

"AMA is one of our privileged partners, we are really satisfied with our partnership. The choice of AMA was largely based on the robustness of the solution which can be used for worldwide field tests, training as well as for communication between Michelin workshops and Research Centers.
This plug and play solution recently enabled us to very quickly deploy remote expertise to handle various emergencies linked to the constraints of covid-19 travel restrictions."

Thomas Florentin, IT Team Leader at Michelin