Automating processes with Assisted Reality

Industry

Transport

Company

ÖBB-Postbus GmbH - Austria's largest bus company

Employees

4000

Project Timeline

5 months

About ÖBB-Postbus

ÖBB-Postbus is the largest bus company in Austria. Every year, Postbus takes 213 million passengers to their destination. The company also operates in areas where no other public transport connections are available. Approximately 70% of all Postbus passengers throughout Austria are schoolchildren who take the bus to school every day. The buses serve around 1,800 municipalities daily, providing public transport connections to even the remotest corners in Austria's rural areas. Postbus is an essential pillar when it comes to public services in rural areas and has been a trustworthy partner to municipalities for many years.

Streamlined and agile inspection of buses

ÖBB-Postbus is acquiring hundreds of new busses or replacing existing buses every year. Their automotive vehicle inspectors are required to inspect the buses and create acceptance reports. This was done via pre-printed lists/logs in paper format. The inspector performed the entire inspection manually on paper and separate devices were used to capture images and videos. After performing the inspection, the inspectors dedicated many hours to create an acceptance report in which they manually logged all the deficiencies and attached the corresponding images. The entire inspection workflow was tedious, time-consuming, error-prone and poorly streamlined. The task was to massively improve this through the use of modern technologies.

The Solution

Assisted Reality Solution

Nagarro worked towards the successful implementation of cutting edge Assisted Reality technology through this project to transform with innovative breakthrough. An inspector will be using Smart Glass to conduct bus inspections. A web-based app is also developed for integration with the Smart Glass app to manage captured information.

Web App

The clerk(s) create work orders in the web app and assign them to the vehicle inspectors. The clerks also have an option to copy and create multiple work orders. When the clerks create and assign the work orders to vehicle inspectors, notification emails (one mail for each work order) are sent to the inspectors (with the clerk in cc), informing them about the assigned work orders.

Smart Glass

The inspectors scan QR code and sync the work orders between the Smart Glass and the web app and then perform the inspection using Smart Glass. The inspector is able to record (audio) deficiencies (if any) and attach images and videos corresponding to each deficiency.

After the inspection, the inspector marks the work order as complete on the Smart Glass and syncs the data from the Smart Glass to the web app. The inspector then reviews the work orders on the web app. After the inspector marks a work order as complete, the operative can generate the acceptance report in a secure PDF format.
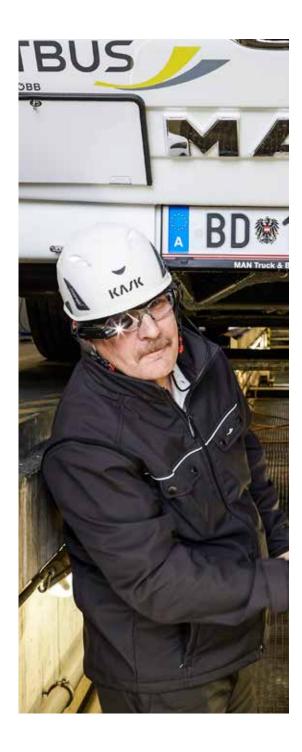
The Impact

Higher efficiency and time savings

1. Hands-free working through multi-lingual voice command controlled Smart Glass.

2. Only one device (Smart Glass) is required to document the defects with sound (audio), image, and video recordings.

3. Relevant documents of bus acceptance can be uploaded and retrieved in the web app for the work order.

4. Whereas the acceptance report used to take several hours, it can now be generated at the touch of a button thanks to Smart Glass data acquisition (PDF which incluldes images).

5. 30% time saving per acceptance, 1/3 more buses can be accepted.

6. Due to the leading edge technologies implemented and great business impact the solution was granted the TÜV Science Award and eAward 2020.

![nagarro logo]

Client Testimonials

"The inspection and acceptance of the post buses by the inspectors was massively simplified and shortened by the use of Smart Glasses. In partnership with Nagarro, a solution using the latest Assisted Reality technology has been implemented very successfully"

Christian Studnicka,
Bus Technician,
ÖBB-Postbus

About Nagarro
In a changing and evolving world, challenges are ever more unique and complex. Nagarro helps to transform, adapt, and build new ways into the future through a forward thinking, agile and caring mindset. We excel at digital product engineering and deliver on our promise of thinking breakthroughs. Today, we are 8,400 experts across 25 countries, forming a Nation of Nagarrians, ready to help our customers succeed. www.nagarro.com