nagarro

Assisted Reality pilot project using Smart Glass
Real-time insights into operations using AR and Smart Glass

CLIENT PROFILE

SECTOR	COMPANY	EMPLOYEES
Telecommunication	A1 Telekom Austria Group	19,000 (as of 2017)

MAKING WORKING CONDITIONS FOR TECHNICIANS SAFER AND MORE EFFECTIVE.

24 million
Customers

A1 Telekom Austria Group is a leading provider of digital services and communication solutions in Central and Eastern Europe. The company has around 19,000 employees and more than 24 million customers. In 2017, A1 Telekom also achieved a great revenue of 4.38 billion euro. Technical acceptance processes serve quality assurance and are subject to strict specifications. It is necessary for various experts to collaborate and record detailed data to securely identify, resolve, and document defects.

A1 Telekom AG required a new technology concept to provide end-to-end support to the technical team in the maintenance procedures on transmitter masts through live connections from experts. A1 Telekom together with Nagarro implemented a new technology concept that uses the latest technologies to simplify acceptance procedures on transmitter masts. In the Connected Worker model, wearables (data glasses in this case) and assisted reality are used together to make processes more productive, working conditions safer for technicians in places that are difficult to access, and the documentation more seamless.

4.38 billion euro
Revenue

The pilot project, which A1 implemented with technology partner Nagarro, now provides the first insights from a live operation. It is so far the only Connected Worker application for outdoor technicians. "We at Nagarro have been working on this technology for a long time during the international development cooperation. These collaborations also include close partnerships with technology and innovation leaders such as Google, Upskill, and Vuzix. Our association with A1 has enabled us to easily implement a PoC within eight weeks," Nagarro Managing Director, Thomas Riedl, recalls the start of the project, "and it very quickly brought the best partners together. In this case it was Google Smart Glass, Upskill with Skylight, and Vuzix M300."

REAL-TIME INSIGHTS INTO THE LIVE OPERATION

The A1 application is designed in such a way that the technical team gets end-to-end support in the maintenance procedures on transmitter masts through live connections from experts and an integrated Assisted Reality software solution.

How does the Connected Worker model work?

- The A1 maintenance technician operates from his office and is connected to the regional field technician, aka the "Connected Worker," via the Assisted Reality solution.
- The technician wears the Smart Glass on the transmission mast during his service, allowing him to concentrate "hands-free" on the maintenance procedure and communicate with other colleagues simultaneously.
- The approval protocol is processed step by step via a dashboard solution.

The Connected Worker Edge

- Real-time defect correction: Minor defects verified during the process can be rectified directly by the assembly technician and other colleagues in real time.
- Error documentation: If real-time defect correction is not possible, the team creates error documentation and collects all the information at hand. Videos and photos are taken with the glasses, and this data is further archived for documentation purposes.

The Assisted Reality solution

- Seamless collaboration: Using data glasses and Assisted Reality technologies, the technical team can now work synchronously with the experts to achieve a high-quality and legally valid sign-off procedure.

- Fast and Secure: The virtual activation simplifies the approval process and focuses only on the virtual gathering. In the case of A1, a high-quality acceptance procedure is now possible in up to a quarter of the time.

- Easy-to-learn and use: The handling of the data glasses is simple, and the test teams learned to work with the glasses within three days on average. The hardware delivered good results even under severe weather conditions such as wind and rain.

REAL-TIME MAINTENANCE PROCEDURE USING AR & SMART GLASS

· A high-quality acceptance procedure is now possible in up to a quarter of the time.

· The POC was implemented only in 8 weeks after the decision.

· The test teams needed roughly 3 days to get used to the data glasses as a working tool.

" We have a pioneering project at the start here; one of the best practices for handling new workflows in the age of digitization. "

REINHARD FABER
DIRECTOR NETWORK STRATEGIC PLANNING AT A1

ABOUT NAGARRO

Nagarro drives technology-led business breakthroughs for industry leaders and challengers. When our clients want to move fast and make things, they turn to us. Some of our clients include Siemens, GE, Lufthansa, Viacom, Estēe Lauder, ASSA ABLOY, Ericsson, DHL, Mitsubishi, BMW, the City of New York, T-Systems, SAP and Infor. Working with these clients, we continually push the boundaries of what is possible to do through technology, and in what time frame. Today, we are more than 5,000 experts across 20 countries. Together we form Nagarro, the global services division of Munich-based Allgeier SE.