Benefits

- Boost speed, cost efficiency and precision of maintenance and repairs.
- Reduce the risk of unplanned downtime and production outages from equipment failure.
- Enable technicians to connect with remote experts anywhere in the world via live, visually guided collaboration.
- Demonstrate compliance with an audit trail of safety steps.

Any company in an industry that relies on equipment will constantly seek to improve the productivity and effectiveness of technicians, engineers, mechanics and other specialists. With higher productivity, the specialists can process more work orders, repair more vehicles and maintain more pieces of equipment. Companies are then able to reduce factory downtime from equipment failures, lower operational costs for maintenance activities and increase business efficiency.

An important aspect of efficient repair and maintenance is experienced specialists, but sometimes they’re in short supply. In addition, many enterprises and industries are losing senior staff due to an aging workforce: Between 30 and 35 percent of the global workforce will be eligible for retirement by 2025, meaning that a vast amount of expertise is on its way out the door.

To help you better leverage experienced resources and resolve problems quickly in the field, DXC Technology offers a next-generation solution using wearable technology that connects technicians remotely to experts anywhere in the world. Remote Expert uses the latest in wearable technology to show the expert a problem and then allow the expert to provide step-by-step augmented reality (AR) instructions that should turn even the newest technician into an efficient repair and maintenance pro.

Revolutionary collaborative experience

While it may remind you of a scene from The Terminator or RoboCop, the Remote Expert solution is not science fiction. It is here and now, and it will change the way your technicians repair equipment and maintain assets.

At the center of this digital transformation and revolutionary collaborative experience is the latest in wearable technology. Smart glasses and head-mounted tablets deliver unprecedented AR with voice activation and wireless capability for true hands-free operations. And it does this while technicians are maintaining and repairing equipment.

Smart glasses technology has evolved rapidly since Google Glass and the “Glass Explorers” captivated the technological world in 2013. Today, multiple vendors are delivering enterprise-class smart glasses with wireless technology, high-definition (HD) stereoscopic see-through displays, voice, gaze and gesture activated controls, HD cameras and integrated sensors.

DXC leverages every aspect of the technology to deliver a hands-free digital user experience driven by three well-integrated key components running on the wearable device: Dynamic Checklist, Remote Expert and Content Management.
Dynamic Checklist: The right information at the right time

Dynamic Checklist from DXC presents step-by-step instructions in a series of cards that use AR to overlay the instructions on top of the piece of equipment being repaired. Each instruction step is presented in a question-and-answer format. Technicians can easily navigate through the steps, and will be directed to the next appropriate step depending on their answer on the previous step.

Technicians can operate in a truly hands-free mode while accessing all the information they need to perform even the most complex repairs. And they are fed the information in small increments — with just the right amount of information at just the right time to efficiently and precisely maintain or repair the equipment.

A company can choose to include instruction cards with videos detailing the safety steps that must be performed for every operation. For compliance purposes, these operations can be recorded, time-stamped and saved at the time each Dynamic Checklist is run, creating an audit trail proving that the technician followed all safety measures.

Remote Expert: Turning any technician into a pro

When more expert guidance is needed, technicians can call the help of a remote expert by activating the “Call expert” command, which will trigger the Remote Expert component. Remote Expert from DXC uses digital collaboration software over a wireless internet connection to instantly and seamlessly link field workers with a company’s experts, no matter where they are located. Simply by saying “Call expert,” less experienced technicians can collaborate with more senior staff to maintain and repair equipment efficiently and effectively.

Through remote “eyes,” the expert sees exactly what the field worker is viewing through the camera on the smart glasses or head-mounted tablet. The remote expert can then guide the field worker until the issue is resolved. If necessary, the experts can take snapshots of the video images they are seeing remotely, mark them up and send them back to the field worker, explaining which nut to loosen or which wire to cut.

Content Management: Access to knowledge

Content such as training videos, documents, manuals, pictures etc. can easily be uploaded in the Content Management system by an office worker. Later on this content can then be accessed by a field worker on the wearable device. Content is tagged with keywords to optimize the search process.

In order to capture the knowledge of the more experienced workers, recordings of work procedures can be created by turning on the camera of the wearable device. The recordings are stored in the Content Management system for later retrieval by new hires or less experienced workers.

Why DXC?

The DXC Mobile Enterprise Services practice has extensive experience in AR and mobile application development. Our end-to-end mobility and AR capabilities provide the necessary industry expertise, processes, tools and services to help you leverage the latest technology in practical ways and take your organization through a true digital transformation.

The Remote Expert platform, coupled with leading-edge technologies and best practices, provides our clients with next-generation business solutions that help solve real-world business problems.

Learn more at www.dxc.technology/xr