AR-Experts

AR EXPERTS

Source / Link: **https://www.ar-experts.de/**

Technology area:	Type of good practice:	Target market segments:
☐ Artificial Intelligence	☒ Company	☐ Discrete (smart) manufacturing
☐ Big Data	☐ Project	☒ Automotive
☐ Digital Twins	☐ Initiative	☒ Aerospace
☐ IoT and IIoT	☐ Programme	☒ Metal processing
☐ Cybersecurity	☐ Other	☒ Consumer goods
☒ VR/AR		☒ Pharmaceuticals and chemistry
☐ Robotics		☒ Food and agriculture
☐ Automation		☒ Health
☐ System Integration		☒ Textiles
☐ Smart Sensors		☐ Others
☐ Additive Manufacturing		
☐ Other		

Summary:

AR-Experts is an AR/VR company that has developed GIRI - the fastest platform for creating industrial Augmented Reality. The platform gives industrial companies the ability to leverage the huge potential of augmented reality (AR) in a simple, but efficient manner. Content creation is one of the main challenges in the implementation of AR systems across a company's operations, and in order to address this challenge, the GIRI app and platform enable its users to quickly create "on-site" AR content for industrial use.

Detailed description

AR-Experts' GIRI technology focuses on the main bottleneck in wide-spread utilization and implementation of Augmented Reality: content creation. It enables organizational employees to seamlessly create AR-based instructions for the purposes of production, service or product manuals. This benefits the future of work because with the GIRI App, organizations can create intuitive AR-based instructions in 90 seconds, which enables workers to perform 83% better. This tends to be particularly useful for industrial partners active in the manufacturing, field service or maintenance, where the know-how is often shared when one employee trains another employee on the spot, also known as on-the-job training. Usually, a worker spends 50-100 hours per year on training and improving its qualification. In comparison, a new worker spends up to 300 hours per year. While this sometimes incurs significant costs, outside developments, such as the COVID-19 pandemic, necessitate new flexibility requirements

in manufacturing and maintenance, which in turn significantly increased the requirements for continuous training. In this case, organisations usually face two training scenarios: 1) Workers try to read the standard operating procedures (SOPs) or instruction manuals, and 2) Your experts stand next to your workers and explain them the process. Traditionally, when training from manuals /SOPs, the following is happening: workers are not interested in reading all the materials, they just browse them because they do not like to read. They overlook the important details and at the end this results in errors - poor training is responsible for about 1.000€ monthly follow-up cost per worker. In the setup where your people are getting trained Face2Face from your real expert the following is happening. Face2Face Training is a direct cause of stress for 50% of the employees because someone is constantly looking at them. This heavily reduces the learning success. The expert (ad hoc trainer), is bound by the training, and cannot execute his actual task. This puts stress on the company and stress on the expert, because he has his own KPIS. A training depending on a few experts results in to few training capacities available. This reduces the flexibility and quality of the company.

By using GIRI and AR in general for training purposes, workers qualify themselves following Augmented Reality workflows on their AR Glasses or smartphones. The expert gets out his phone or puts on his smart glass and just records what he is doing, and then shares it with the rest of the employees, which then can rewatch the training as much as they need. Our typical experience here is, that people can train 90% of their time alone. Which enables one expert to train 10 times the amount of people.

Beneficial Results

Practice and research have proven that using AR for training purposes in industrial and manufacturing sectors leads to a number of benefits for the organisation and its employees. Some of the main benefits are:

- According to the company, workers at BMW who got trained with Augmented Reality did 62,3% fewer assembly mistakes and 83,6% fewer mistakes in the order of assembly compared to conventional paper-based training;
- Training with Augmented Reality frees trainees and experts (trainers) from stress;
- People are much more motivated because they can perform much more varied tasks;
- Because people can perform much more tasks, the whole company becomes more flexible;
- People can learn in social distance without close contact with their co-workers and your company becomes ready for post-Covid times.

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