



INDUSTRY 4.0 | MODUS HOLOLENS SHOWCASE

VR INSIDE HoloLens in use in warehousing and production

“The HoloLens demonstrator allows us to give our customers a clear demonstration of how they can use new developments in digitization in their industrial processes – and in conjunction with ERP solutions.”

(Modus Consult, Gütersloh)

The task

Create a demo application of Microsoft HoloLens to enable showcasing

Modus Consult wants the whole world to see it. The successful software company offers its industrial customers ERP solutions, document management systems (DMS), as well as business intelligence (BI) all from a single source. Following the motto „Digital Evolution“ at this year's edition of Bechtle Competence Days, the software developers based in Gütersloh wanted to show what they have to offer in terms of Industry 4.0. And not just there. The

HoloLens demonstrator is also used in customer meetings to demonstrate how production processes – from planning through to monitoring – can be optimized when combined with ERP software.

The solution

HoloLens demonstrator demonstrates industrial processes

The Raumtänzer AR/VR experts built a reusable tabletop model which, when used in conjunction with a Microsoft HoloLens headset, simulates the process from order picking through to production. It makes the process tangible thereby allowing the user to experience it directly. HoloLens has a direct interface to the ERP system which can be used to plan and monitor production orders. As a result, the user is provided with up-to-date information – about production orders, stock levels, machine statuses, for example – via the AR headset.

In the first step of the demonstration, i.e. order picking, the user is guided through picking by HoloLens. This means that the headset shows the user which parts they have to remove from the boxes and in which order.

In the demo application, ultrasonic sensors were used to confirm that removal had taken place. Even at this stage in the process, the appropriate programming makes it possible to alert the staff member directly in the event of incorrect removal (incorrect picking), thereby allowing the staff member to correct the error independently.

In the second step of the demonstration, i.e. the production order, the user is guided through the loading of the machines by the AR headset. The user is shown exactly which component is used in the machine and where it is used.

Conclusion

Possibilities for interaction between HoloLens and ERP software

In just a few simple steps, the HoloLens demonstrator demonstrates what the AR application is capable of as a result of interaction between the HoloLens headset and the ERP software.

Depending on how the headset is programmed and the hardware and software it is connected to, it can provide the user with further information on the one hand and, on the other hand, feed information from the user into the system.

This allows any progress in the production order to be transferred directly to the ERP system. As the warehouse and the machine manage their statuses independently and transmit them to the ERP system, this scenario is also the implementation of the Internet of Things (IOT).



INTUITIVE

Possibility of intuitive operation (with appropriate design).



QUALITY

Improvement of quality control and reduction of error rate.



RESOURCE-SAVING

Increase in productivity and efficiency of the individual Employees.

If you would like to know more, please get in touch with us, visit our demo room in Rheda-Wiedenbrück or write us a message.

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