

We extend your reality With 3D and Augmented Reality solutions





INHALT

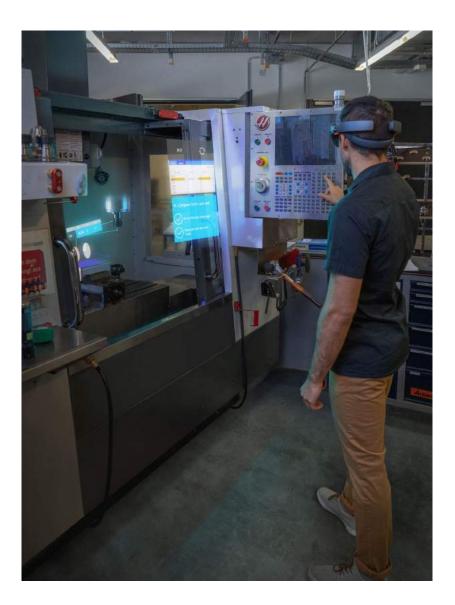
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INTRO About us

Everyone talks about digitalization. We're the ones who make it!

VISCOPIC is an expert for 3D- and Augmented Reality (AR) solutions. Together with industrial enterprises the young company is developing prototypes in individual projects, evaluates use cases and implements software solutions. As an expert for AR VISCOPIC not only develops software solutions for general use or individual needs - the start-up also consults companies regarding possible applications of Augmented Reality and assists them with the implementation of the software. The Team made up of 17 experts continuoulsy develops innovative Augmented Reality software solutions. As an official Microsoft Mixed Reality Partner, VISCOPIC can combine technical knowhow with profound economic understanding.



Key Facts



Education and training

We create a digital twin of physical components, plants or machines. This digital twin acts like the real machine and is used for the training of technicians. Technicians can learn with the digital twin. Maintenance steps, workflows and even operating the machine can be simulated. As an output device you can use either high-end virtual reality glasses like HTC Vive, AR glasses like Microsoft HoloLens or just tablets and smartphones. Research at Stanford University found out that gained experience in virtual worlds results in the same learning outcome as trainings in the real world. According to these results immersive learning applications which are based on mixed reality can replace the practical learning on real machines.



Production

In production, instructions and important information can be displayed in real time to the operator. This enables him to carry out work with is hands free, while keeping an eye on all important data. The advantages are enormous: errors can be avoided, time can be saved, quality can be controlled more easily and overall efficiency is increased.





Individual projects

VISCOPIC's years of Mixed Reality experience in the field of proof-of-concept projects and developing Augmented and Virtual Reality applications makes us experts in evaluating use-cases, business opportunities and technical feasibility of using Mixed Reality in industrial settings. For individual projects we consult companies regarding their unique use case and develop tailor-made applications.



Marketing and Sales

Holographic visualisations allow the presentation and explanation of complex products or hidden functionalities. Not yet released products can be shown in advance to customers as holograms in miniature, real size or oversize via Augmented and Virtual Reality marketing applications. The possibility of real-time manipulation of the holographic scene enables to directly incorporate customer demands and present them in a realistic way. Customers dive into a memorable experience of merged real and virtual worlds.



COMPANY Our mission and vision



BRINGING VIRTUAL CONTENT TO LIFE - OUR VISION We want to extend reality and revolutionize and simplify the working world in the industry with Augmented Reality solutions.



SIMPLER, FASTER, LESS COMPLICATED – OUR MISSION

Efficiency is our keyword. We want to make the world of tomorrow simpler, faster and less complicated - by supporting industrial companies in their digital transformation. With the right ideas and modern technology we help our customers achieve their goals efficiently and find solutions that are long-term and cost-effective. "The biggest challenge was to create a system that would allow users to generate augmented reality workflows as easily and quickly as possible without having to understand the underlying technological complexity. With VISCOPIC Pins we have managed to provide AR beginners and experts with a tool that is suitable for fast AR prototyping as well as scalable content creation. I am always excited to see that it is now also possible for novices of Augmented Reality to implement their own use cases with Augmented Reality smart glasses such as the Microsoft HoloLens within minutes instead of weeks." – Felix Meißgeier, Co-Founder and Head of Product Development at VISCOPIC



Products





With this software you can easily and quickly create Augmented Reality content - customised to your needs with no need for proramming skills. Pinpoint digital information exactly onto desired points of real objects and revolutionize manual work flows in production, quality assurance, maintenance, installation or training. The first 'out of the box' software that allows you to convert 3D CAD data into interactive 3D animations or simulations, such as instructions for industrial plants or training content. The Windows application is easy to understand and extremely versatile.



No more time-consuming processing of your CAD Data for AR glasses. With VISCOPIC Polygons you can optimize 3D CAD models easily for quick use on the headset. Additionally, you can do the rendering on the high performance computer to then transfer the output via wifi onto the device, like the HoloLens, in just one mouse click. Data intensive models can therefore be displayed on the Augmented Reality device within just seconds.

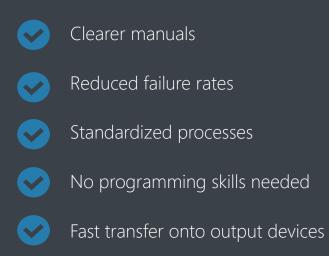








VISCOPIC Pins is an editor with which AR content can easily be generated. The operation is intuitive - with just a few mouse clicks, content can be placed on a CAD model and then viewed as a hologram at exactly this point on the real object using AR glasses, a tablet or a smartphone. Possible application fields are training for production and quality management, maintenance and repair of machines.









VISCOPIC Steps is a tool for creating step-bystep instructions using animations on 3D models. These simulations of working steps and processes can be used as training or working documentation. The main problems with conventional training are the limited access to real machines for training purposes, complex and difficult to understand documentation and the high amount of time and costs that need to be invested. VISCOPIC Steps solves these problems by makking the creation of 3D content that can be used anytime and anywhere for training possible.

Minimizing assembly errors

Decreasing language barriers

Reducing translation efforts



VISCOPIC Polygons make a good and fluid representation of 3D models on data glasses possible. Due to the often low performance of the glasses, it is difficult to display large CAD models on them. Using Polygons, the rendering of the models is outsourced to a powerful computer and the output is transferred to the HoloLens in real time. Polygons can also be used to quickly and easily optimize models.

Automatic removal of invisible or very small parts



Outsourcing of the rendering

Output via Wifi onto the HoloLens





Who we are

The founders of VISCOPIC



The founders of VISCOPIC met in 2014 during the Munich Unternehmer TUM program and developed first ideas for the use of Augmented Reality in an industrial context. Early on the three discovered the potential of Augmented Reality for the use in the industry. After the conferement of the German E-Learning Innovation- and Young Talent Award, winning the WeConomy contest and the participation in the TechFounders Accelerator Program, VISCOPIC was founded in spring 2016 as a GmbH.



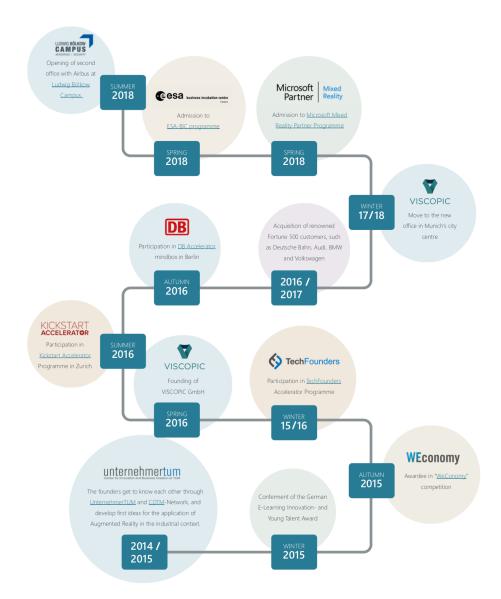
The Team

Passion needs brilliant minds - our multidisciplinary team consists of talented and ambituous software engineers, developers, marketing experts and leaders. Together, we extend your reality.





Our history



We are proud of our achievements and the partnerships we could establish and we hope for more successes in the upcoming years. -Marco Maier, Managing Director



References



At DB Netz AG 8000 maintenance engineers are responsible for maintaining the rail network. However, the challenge is that by 2026 half of them will retire and new employees will have to be trained. Together with DB we have virtually recreated a part of the company's infrastructure, to educate new employees and lateral recruits for training models, digitally with Augmented Reality. This is how we help companies improve their training quality, security of action as well as the interaction of theory and practice. With this project VISCOPIC won the german eLearning Award 2019 in the Category AR together with DB.

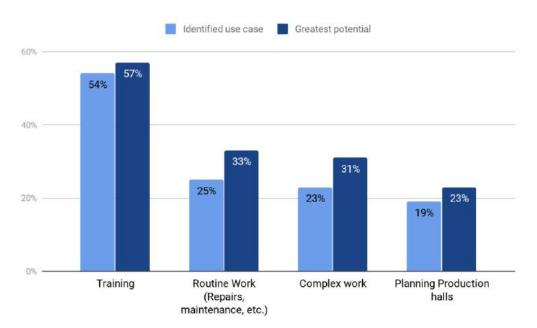


Together with the Volkswagen Education Lab we are bringing the corporate's robot training to the Augmented Reality world. Projected via the Microsoft HoloLens, a holographic robot representation will allow the technicians to learn how to handle robots, which are largely used within the enterprise. Since the physical machines are being replaced by holograms, Volkswagen will be able to execute future trainings efficiently at any time, in any place and at no extra costs.



STATISTICS AND TRENDS

Augmented and Mixed Reality change the way we work like no other technology. Many areas can benefit and be improved by applying Augmented Reality. AR is not only a groundbreaking technology in the entertainment sector - the application areas are much larger. Especially in the industry the work is revolutionized, because standardization, quality assurance, training and production processes can be optimized enormously. The strong growth in the use of AR and the associated strong increase in the spread of the technology show how important the use of such tools is. The adjacent diagram shows which fields of application for mixed reality



have already been found in companies. At the same time, the potential for improvement in this area was assessed. All these fields can be greatly improved by Augmented Reality technologies. For this reason, VISCOPIC's work is strongly future-oriented and groundbreaking.

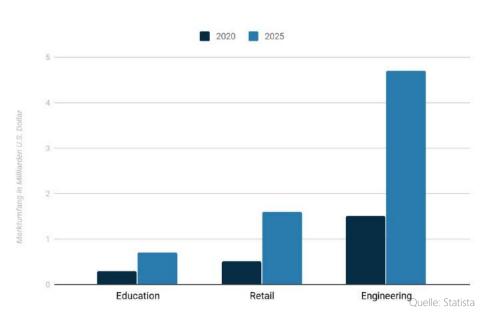
Quelle: Harvard Business Review - Mixed Reality



THE FUTURE OF AUGMENTED REALITY

The work of VISCOPIC focuses mainly on the application of Augmented Reality in the areas of training, quality assurance, maintenance and repair. Especially in these areas the technology can mean enormous progress in the industry. In order to follow rapid developments, processes must be simplified and digitized.

The expected market volume of Augmented Reality shows how important the technology will be in the future. Especially in engineering, a strong growth of the market volume of AR is expected. This shows how large the growth of Augmented Reality is and how important AR will continue to be for us.





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