Your expert in innovative process digitization
Analyse processes, identify potential and make use of opportunities
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Everyone talks about digitalization. We’re the ones who make it!

We offer you a wide selection of assistance systems to make your processes more efficient. This way you can save time, reduce errors and at the same time increase the training efficiency and operational security of your employees. Together, we analyze your processes and identify potential for improvement. As a digitization partner, we assist you in the implementation process by offering pragmatic approaches and a wide range of innovative technologies to maximize your process efficiency and to help you position as a pioneer in innovation and immersion.
Key Facts
We support you in digitizing and optimizing your industrial processes by using diverse state of the art technologies.

- 3D Visualization
- Augmented Reality
- IoT

- CAD Processing
- Mobile-/Webapp Development
- Virtual Reality

- 2D/3D Computer Vision
Our Approach

PHASE 1
Analysis of the status quo & identification of the use case
You would like to support your employees with the performance of their tasks within a process? In a 1-2 days Workshop at your company, we analyze your processes on site together, carry out expert interviews and behavioral observation in order to generate ideas regarding the optimization of your processes.

PHASE 2
Identification of optimization potential & development of action plan
During the next step we identify potential for optimization in your processes and define priorities according to necessary actions. Therefore, we create a storyboard and collect all necessary data to build a first prototype.

PHASE 3
Development of a prototype
Once there is a storyboard and all relevant data, we develop a prototype in an iterative process. As a result, you get an installable software, including the documentation. As an expert in digital solutions, we are able to draw on a wide range of technologies to provide you with the best solution possible put together from standard products and individual services. After implementing the prototype we perform user tests using different methods to get information about the added value of the solution.

PHASE 4
Implementation of scalable software solution
As a direct implementation partner we guide you through the integration of a scalable software solution. This is the beginning of your long-term success.
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
With this software you can easily and quickly create Augmented Reality content - customised to your needs with no need for programming skills. Pinpoint digital information exactly onto desired points of real objects and revolutionise manual work flows in production, quality assurance, maintenance, installation or training.

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 smart glass. 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.
VISCOPIE 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.

With the VISCOPIE Pins Live Editor, workflows can now be easily created directly on the real object via the AR device. You no longer need a CAD model, but can scan a QR code to place the pins directly on the machine and add images. Content previously created with the Desktop Editor can be downloaded from the VISCOPIE Portal and then edited on the real object in the Live Editor. The projects can be uploaded to the portal again and, on the other hand, edited further on the Desktop Editor and enriched with more media such as holograms, videos and text.

- Clearer manuals
- Reduced failure rates
- Standardized processes
- No programming skills needed
- Fast transfer onto output devices
- Full automatic import of external workflow content via Scripting functionality
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 ambitious software engineers, developers, marketing experts and leaders. Together, we extend your reality.
In a joint project with Deutsche Bahn, VISCOPIC was able to revolutionize training in the company and thus counteract the demographic change and the associated problem of knowledge transfer. A solution was developed with which complex repair and assembly processes can be learned efficiently. Part of the company's infrastructure is mapped virtually in order to bring a training model into the classroom and provide new employees with digital content. 3D representations of switches are projected into the virtual room via AR glasses. Using the realistic holograms, the assembly of individual parts or the repair of faults is trained without great effort. Displayed step-by-step instructions allow repairs in real time. With this project VISCOPIC and DB won the German eLearning Award 2019 in the category Augmented Reality.

"DB Netz AG is very pleased to be working with such an innovative company as VISCOPIC. Without the startup, we would not have been able to expand our training processes so quickly and to establish a connection between theory and practice in such an innovative way."

Michaela Horst, Deutsche Bahn
Together with the Volkswagen Education Lab, VISCOPIC brings the company’s robot training courses into the world of Augmented Reality. Using a holographic robot representation, technicians are able to learn how to operate the robots that exist in VW’s production facilities. To simulate the training scenario with a hologram of the robot, the 3D representation is visualized with Microsoft HoloLens. This virtual twin is connected via the Hololens to the regular input device used for real robots. The holographic robot representation helps the car manufacturer considerably to increase the handling and production safety. As the physical machines are replaced by holograms, the Group will also be able to conduct training efficiently at any time and any place without any additional costs.

“With VISCOPIC we have designed and implemented a holographic robot training as part of a corporate startup cocreation. This is the result of a successful and very cooperative collaboration in which both sides can optimally bring their strengths into the project and thus create innovative training processes.”

Matthias Wildgrube, Founder of Volkswagen Education Lab
In quality assurance, Audi relies on new technologies to meet requirements with a future-oriented approach. Many aspects have to be considered in quality assurance. Specifications such as dimensional information, the nature of components or distances always needs to be available and should be able to be checked in the shortest time possible. With the help of VISCOPIC Pins, workflows for testing a vehicle can be simplified by displaying information such as component markings, dimensional information or documentation videos as holograms. In the Audi Quality Assurance training centers, augmented reality is used to efficiently train new employees. With AR, work steps are carried out more accurately and less is overlooked. The use of AR also creates an exciting experience for employees who can experience first hand how Audi is supported by digitalization in production.

“Our goal is to simplify complexity through digital tools. Mixed reality makes it easier to learn complex work processes and shows how digitization can support us.”

Peter Mück, Senior Quality Assurance Manager
The energy systems manufacturer VIESSMANN is working on the process suitability of different applications in their production plants in the Smart Factory department. In several joint workshops with different departments, use cases for augmented reality were identified, in the areas of maintenance of their own production machines, training of new production employees, training of service technicians and customers as well as documentation in service. In order to evaluate the large number of use cases as efficiently as possible, one of VIESSMANN’s requirements were that the augmented reality content can be created by their own employees without having to have programming knowledge. We were able to provide this with our software PINS. The maintenance of internal production machines has proven to be of high potential for the application of augmented reality. By overlaying digital information onto the real machine, employees can be guided through the work process quickly and efficiently.

“Digitization is a huge topic for us. With VISCOPIC Pins and the AR technology involved, we aim to lean processes in the future, enhance efficiency, overcome spatial barriers and use this topic as a future opportunity for us.”

Judith Blaser, Project Manager Smart Factory
AR offers the automotive industry many options. For this reason, Porsche AG and VISCOPIC came together during the STARTUP AUTOBAHN innovation program. The requirements of the car manufacturer were to find a scalable solution that adapts to the constantly changing requirements of the prototype environment at the Porsche Pilot Center. During the assembly of a rotor, various components are installed whose differences cannot be detected by the human eye. Technicians are faced with the challenge of not being able to recognize the correct order of the parts. With the VISCOPIC Computer Vision Setup, components can be scanned individually and the scanned images compared with the CAD originals. This information is then forwarded to VISCOPIC’s augmented reality software, which instructs the operator and reduces the error rate. This innovative approach serves as a universal tool that can be applied to many other component types.

“With VISCOPIC we developed a proof of concept with a very innovative solution, which will ensure our future processes.”

Tobias Schmack, Technology Development Electric Engine
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.

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.