

VReduNet

Klaus Stöttner – pool3

01.06.2021

**Pool3 VR core and ecosystem –
from a single application to a fully
integrated VR training concept**

Extended
reality

Spatial
Computing

**Augmented
reality**

VR-Training

Virtual Reality

360° Content

Immersive
learning

**Mixed
reality**

Immersion through perception

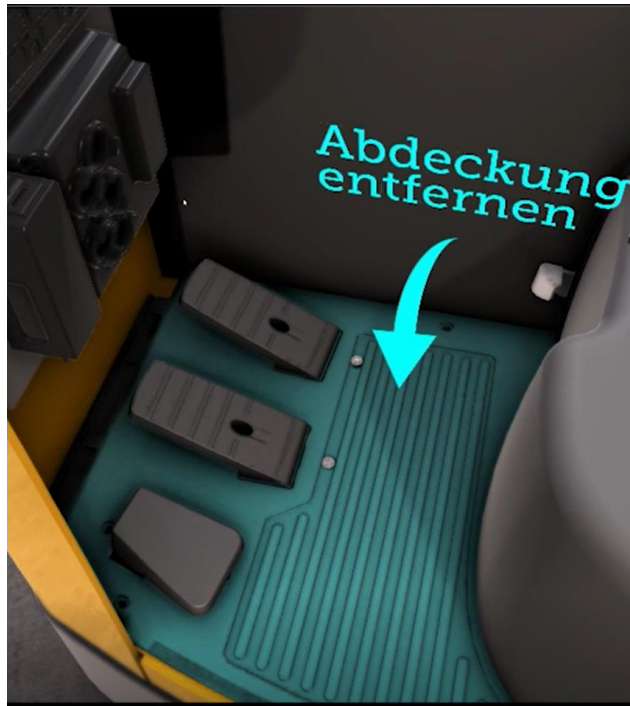
= Immerse yourself in a virtual environment involving all your senses

Our aim:

Enable the consciousness of the user to perceive the virtual environment as real or normal.

Immersive learning as a central R&D activity at pool3

- 20 years of experience in complex 3D media design
- Technical Background in our productions
- ROI
- VR as R&D focus since 2014





*„Tell me and I forget.
Show me and I remember.
Let me do and I understand.“*

Konfuzius, 551–479 BC

benefits

- save time and money
 - Travel costs
 - Reduce downtime
 - efficient time managementn
 - Space requirements
- increase safety
 - experience dangerous situations
 - Improvement of training
 - Multilingual Training
 - HR processes
- better QM in learning process
 - Level of attention
 - documentation
 - Analyse tools
 - Fully digital Process

VR studies prove advantages

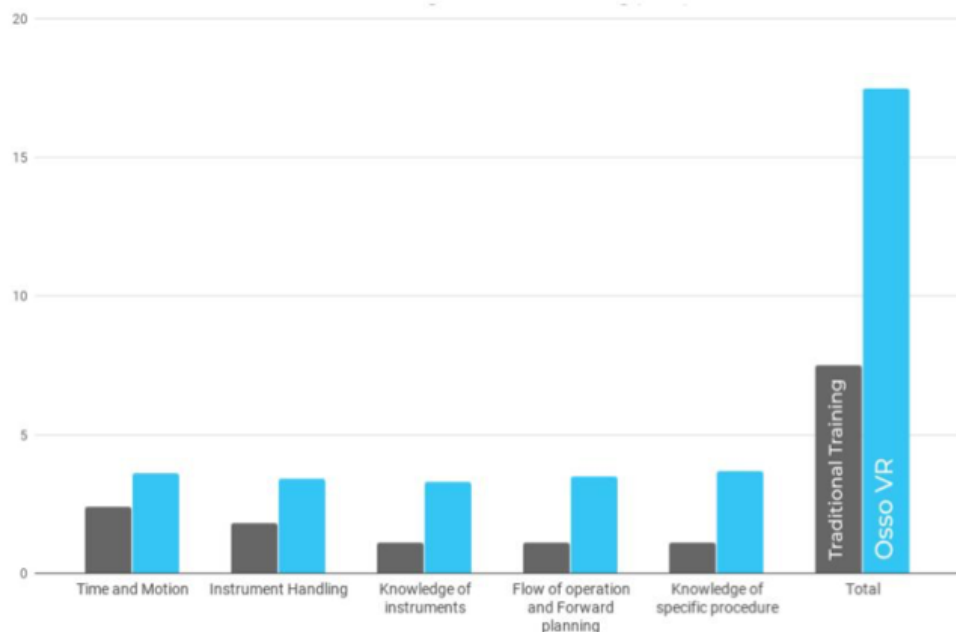


Use of VR in the training of surgeons: higher learning success—scil.ch

VR soft skills training
Study – pwc.com

GRS Score for tibial shaft fixation on a Sawbones model.

Osso VR Training vs. Standard Training (n=20)



Virtual Reality and Standard Training for first time simulated tibial shaft fracture intramedullary nailing. Randomized Blinded Study in Novice Medical Students UCLA David Geffen School of Medicine. 2018



Source: PwC VR Soft Skills Training Efficacy Study, 2020



A practical approach to 3D learning

- 3D-learning method
- Process integration
- Training goals - learn, practice, experience, apply
- Complexity of the task - degree of interaction - attention
- Need to scale in terms of infrastructure
- Relevance of spatial perception for training success

Interaction and movement

- How would you solve it in reality
- Focussing the tasks
- Standards for interaction
- How to move without moving



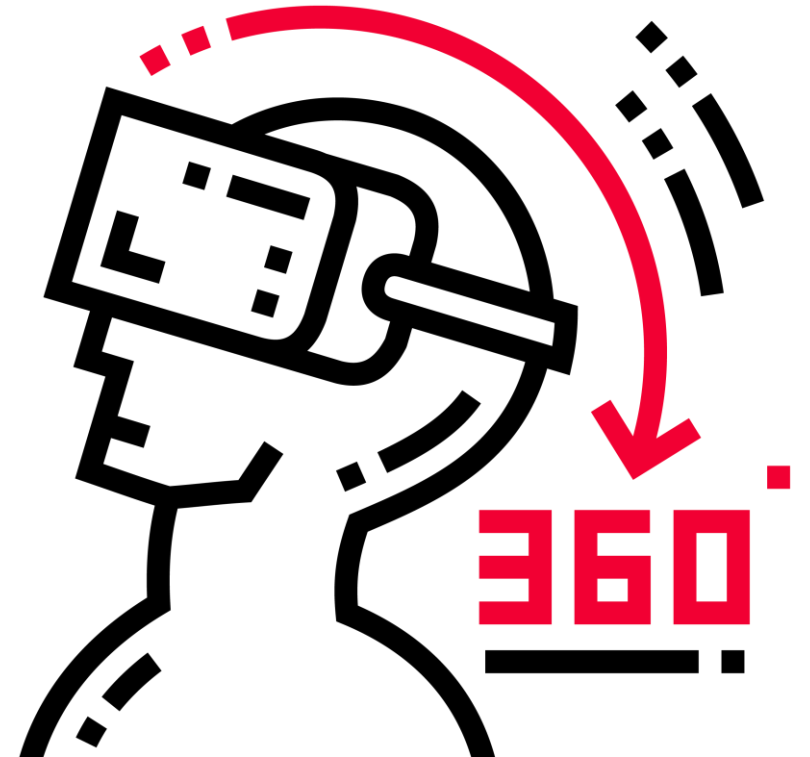
Haptics and Sounds

- Intuitive movement and control
- real and simulated Haptik
- Acoustic perception
- Further perception with mixed reality hardware

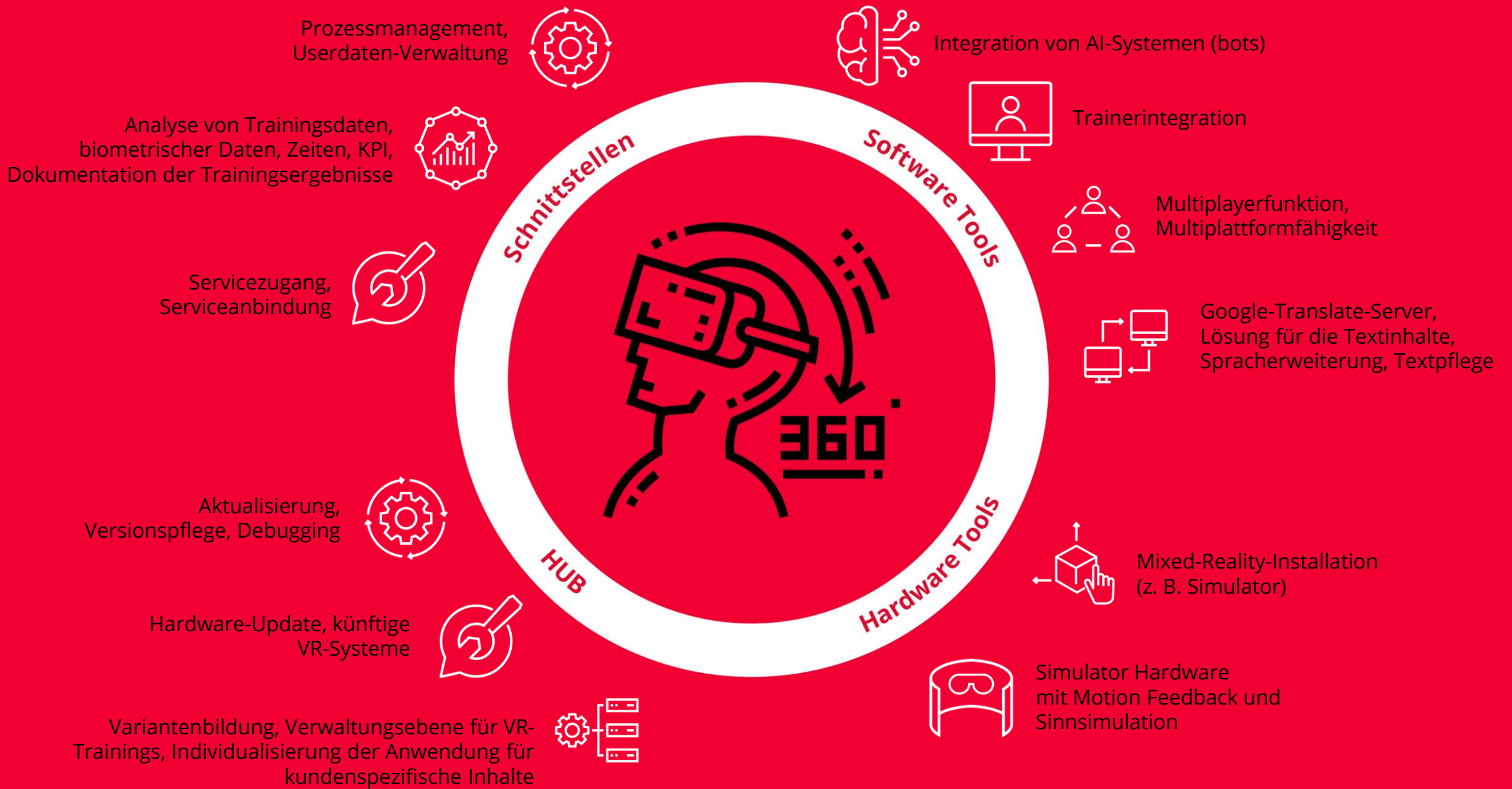


pool3 VR CORE goals

- Make it as intuitive as possible
- Content matters most
- Appeal certain senses
- Transferring experience into standards
- Increase effectiveness!







VR Training Simulator -Hardware

ETV



EFG



EKS



EKX



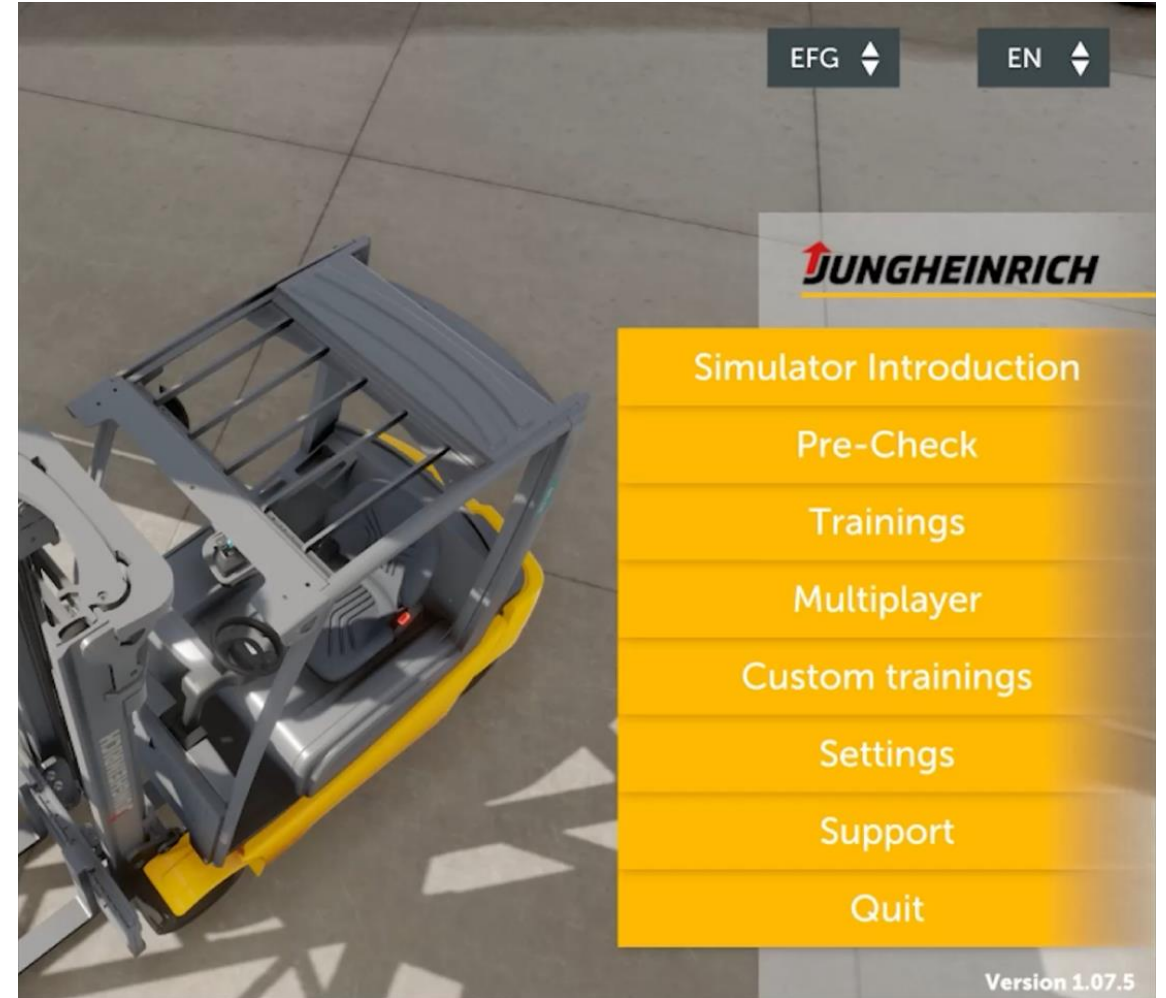
After sales service

- Continuous development
- Automatic updates
- Manage customer content
- VR Hardware support



Localization

- multilingual
- Backend solution
- Google translate
- Different content (units, standards,..)
- Different product variants



Customizability

- Customer Branding
- Different Environments
- Special Training levels
- Adjustable behaviour
 - Driving, reaction
 - AI bots
 - Obstacles
- Control hardware with thousands of possible occupancy options
- Automatic content distribution



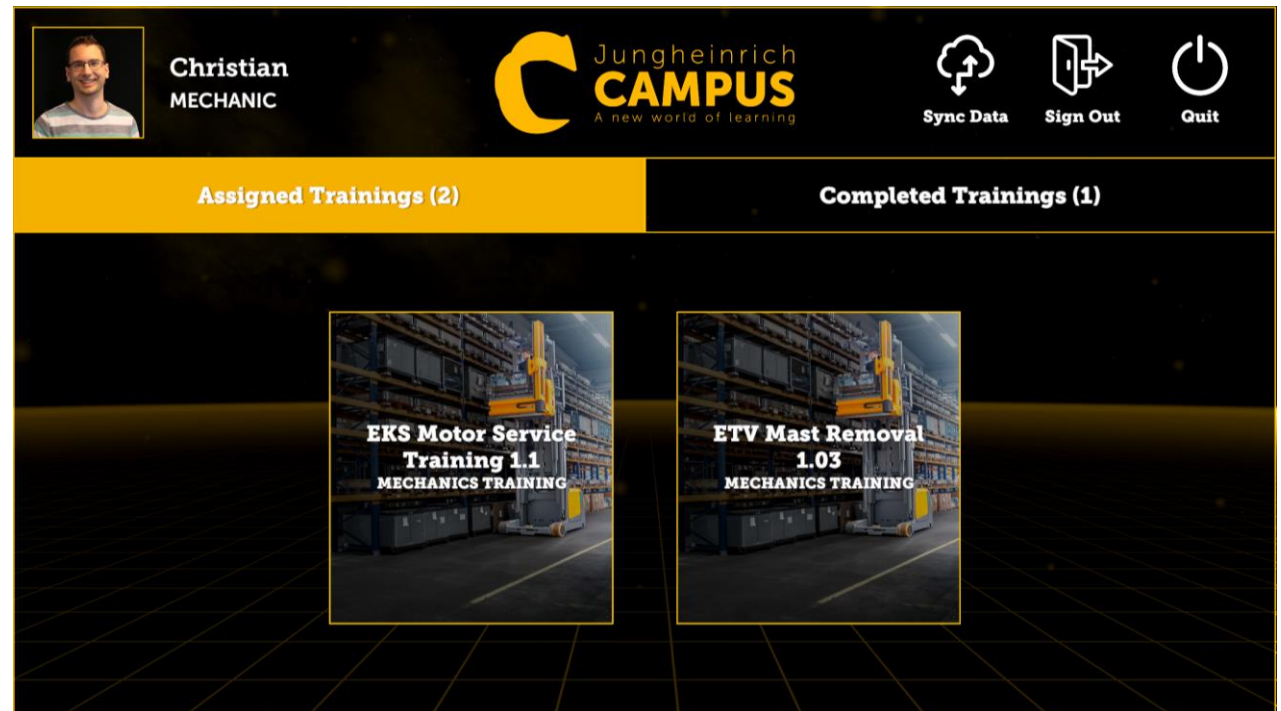
Network and Evaluation

- Multiplayer
 - external Trainer
 - Several Trainees in one scenario
 - VoIP, Trainer Cam
- Training evaluation
 - Time, errors
 - Evaluation of individual steps
 - Replay mode
 - Data processing via LMS, ERP
- Remote Support help desk via team viewer



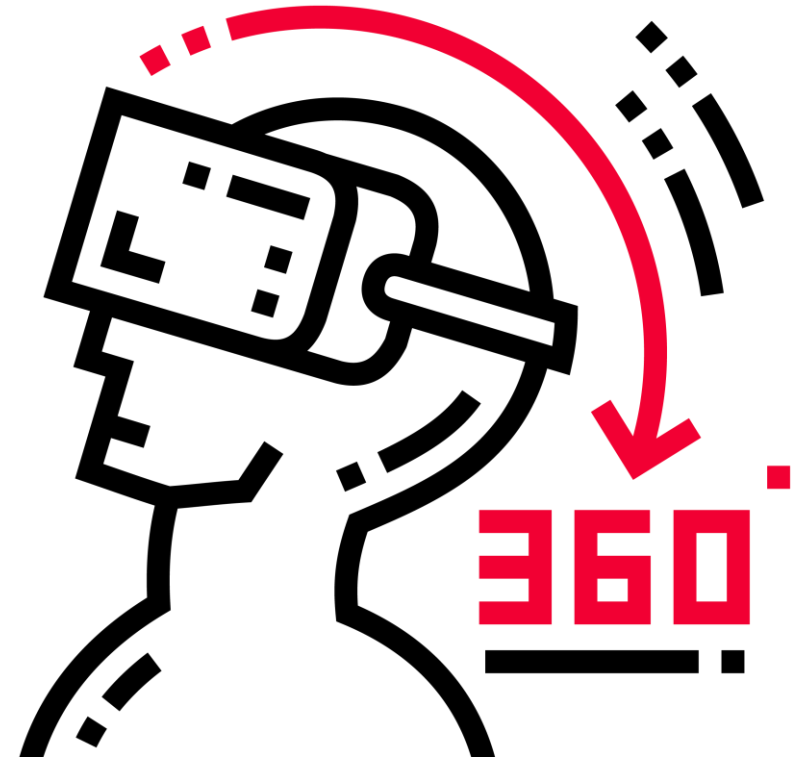
pool3 - HUB

- a central, network based administrative level for trainingscontent
- Connects Training App with Trainees and Trainers
- Worldwide Trainerintegration via webBrowser
- LMS integration



pool3 VR ecosystem goals

- Fully integration in clients processes
- Total control of who, what, when
- low administrative effort
- Provide service access
- Increase efficiency!



pool3 Kontakt

Klaus Stöttner
Geschäftsführung

pool3 GmbH - Technische Animationen & VR Systeme

Alte Straße 4
A-4174 Niederwaldkirchen

t: +43 7231/33011-11
m: +43 664 887 280 51

www.pool3.at

