

# Digital learning and training modules

---

evrbit

## Digital learning and training modules

- What exactly do we do?
- Who trusts us?
- What can we show?

# evrbit

## Digital learning and training modules

### → **What exactly do we do?**

- Who trusts us?
- What can we show?

## Research, invent, create.

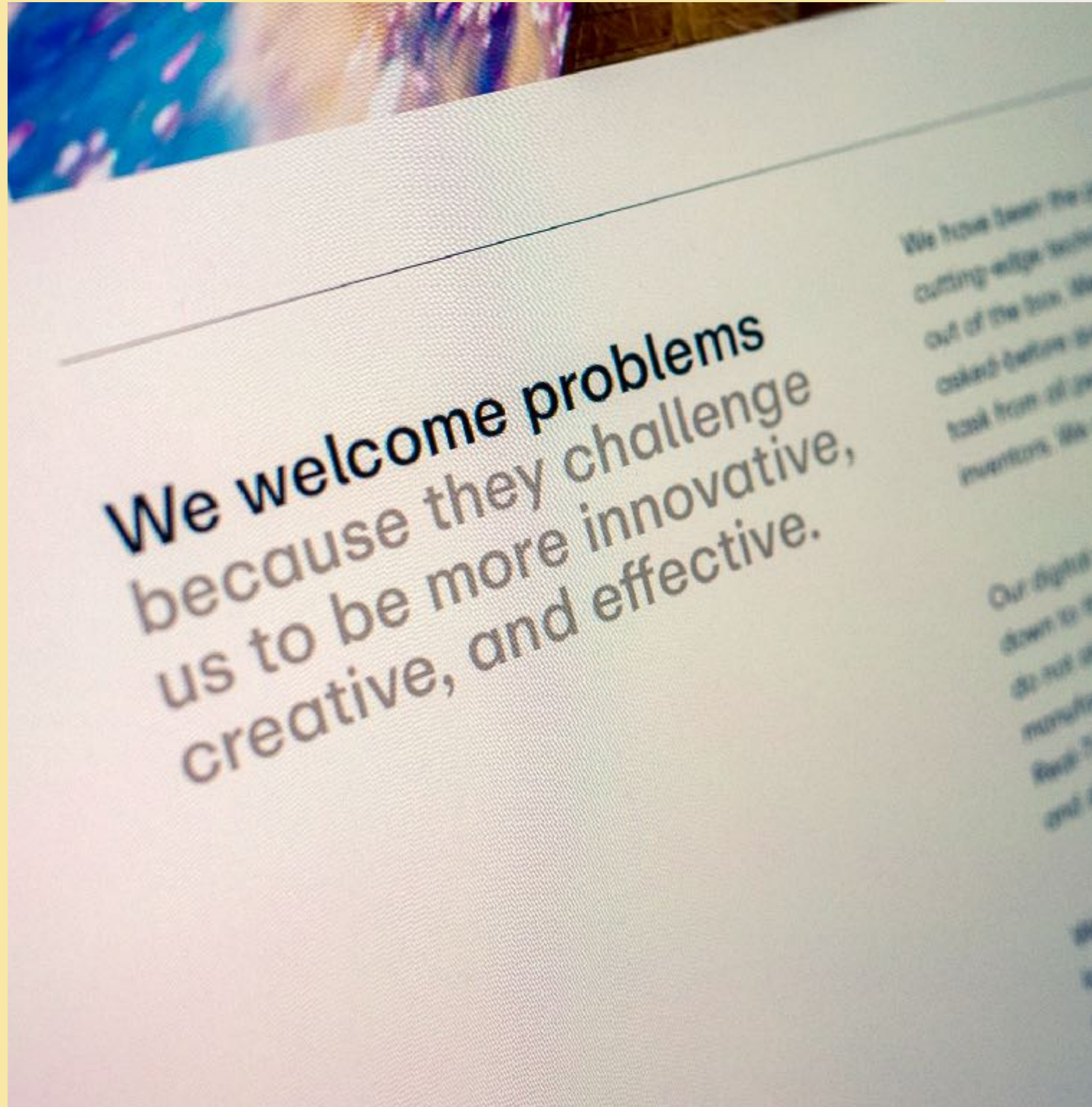
We are a creative, design- and digital-savvy, technology-driven **team**.

We connect the analogue with the digital world using the **most appropriate and meaningful technologies**.

We design groundbreaking **strategies** for sustainable and innovative solutions for digital transformation. To do this, we think freely and ask unexpected questions because we consider every task from all possible angles.

As a result, we develop high-tech **applications** for **B2B and B2C** use. Our focus is explicitly on intuitive operation and the comprehensibility of all content.





## Our expertise

We offer sound advice on digital transformation. The resulting innovation strategies may require diverse digital technologies.

### **Digital learning and training modules**

### **App and web development**

### **Realtime 3D**

- Augmented Reality (AR)
- Virtual Reality (VR)
- Digital Twin

### **Connected Experiences**

- VR Cinema
- Digital showrooms

### **Internet of Things (IoT)**

# We get things done.

## Digital learning and training modules

- What exactly do we do?
- **Who trusts us?**
- What can we show?

## Our references

**SAMSUNG**

**UNIKLINIK  
RWTHAACHEN**



**Cornelsen**

elasMocean





## Digital learning and training modules

- What exactly do we do?
- Who trusts us?
- **What can we show?**

# Samsung AR Galaxy App / Web

Samsung is one of the largest providers of mobile devices and has been one of evrbit's customers since 2017. Starting with a joint digital learning project with Cornelsen (VR@school), it has evolved into a digital journey of XR applications.

It all started with an app for training salespeople: even before the sales launch of new mobile devices, salespeople were trained with digital twins of the models and were thus able to familiarise themselves with the new devices and the new features. In the next step, **digital training catalogues** were integrated into the app for training purposes, covering more than 50 devices of the Samsung family, presented in a real environment with **augmented reality**.



A high-end 3D model augmented into real space can be rotated by **touch navigation** and viewed with a smartphone, floating freely in space.

# Samsung AR Galaxy App / Web

In addition to the app, there is a **web application** that shows the product catalog. When clicked, a high **quality real-time 3D representation** appears, which enables a detailed representation of the mobile devices. The devices can be individually configured and features can be highlighted. This enhances the user experience even before the purchase.

In addition to B2C communication, a supplementary embedding option was set up for B2B customers such as mobile phone providers to integrate Samsung's devices via link on their website. There, they are **interactively** displayed in real-time 3D and can be viewed from all sides. In addition to technical data, the **innovations and special features of the new models (USPs)** can also be highlighted.

For the WOW effect with the potential buyer.



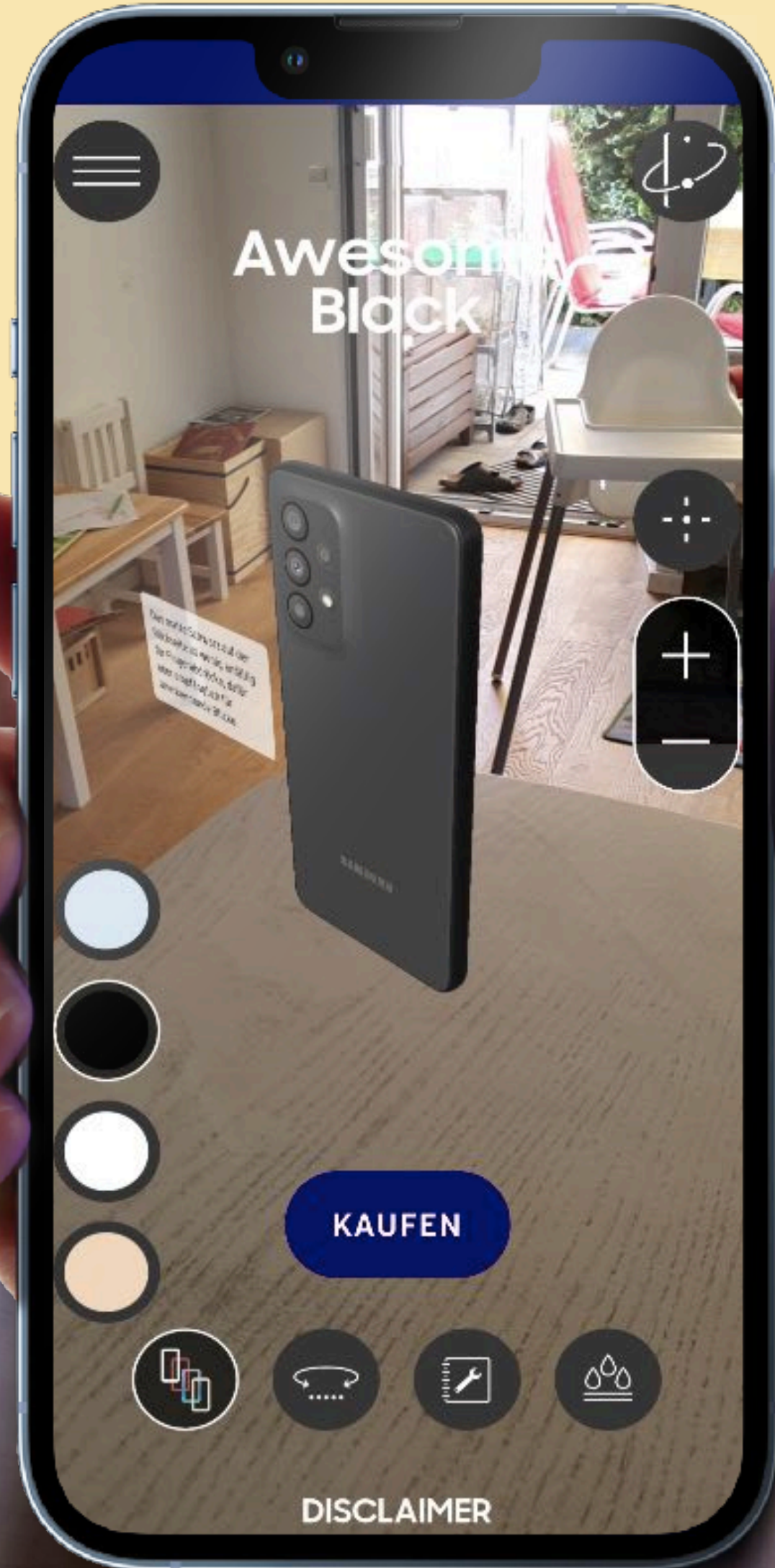
Free-floating **info boxes** following the 3D object invite further interaction.

**3D and AR**

The 3D mobile device comes into its own in the augmented environment.



**Awesome Block**



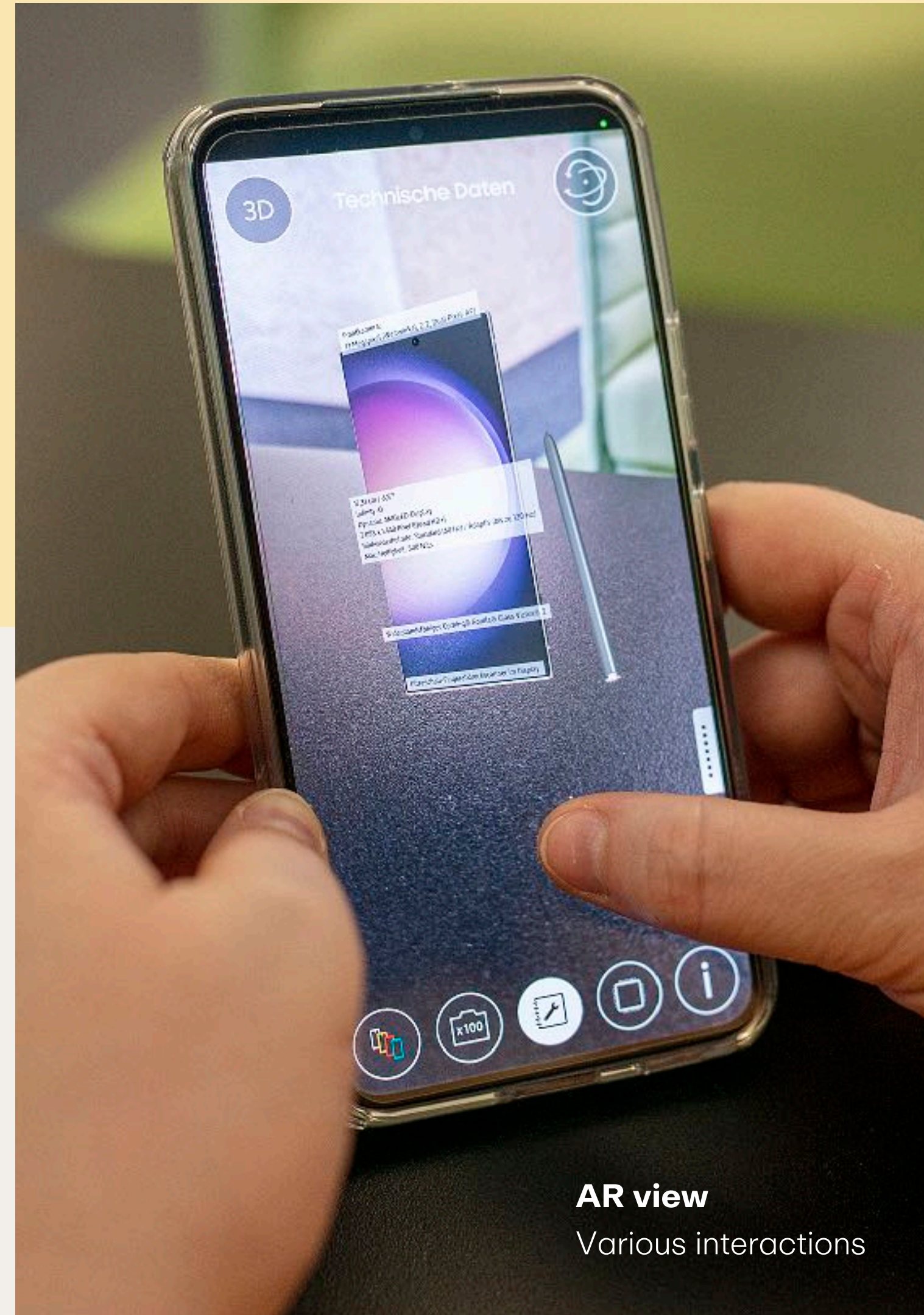
**Facebook and Instagram**

Filter to map your own face onto virtual mobile device.

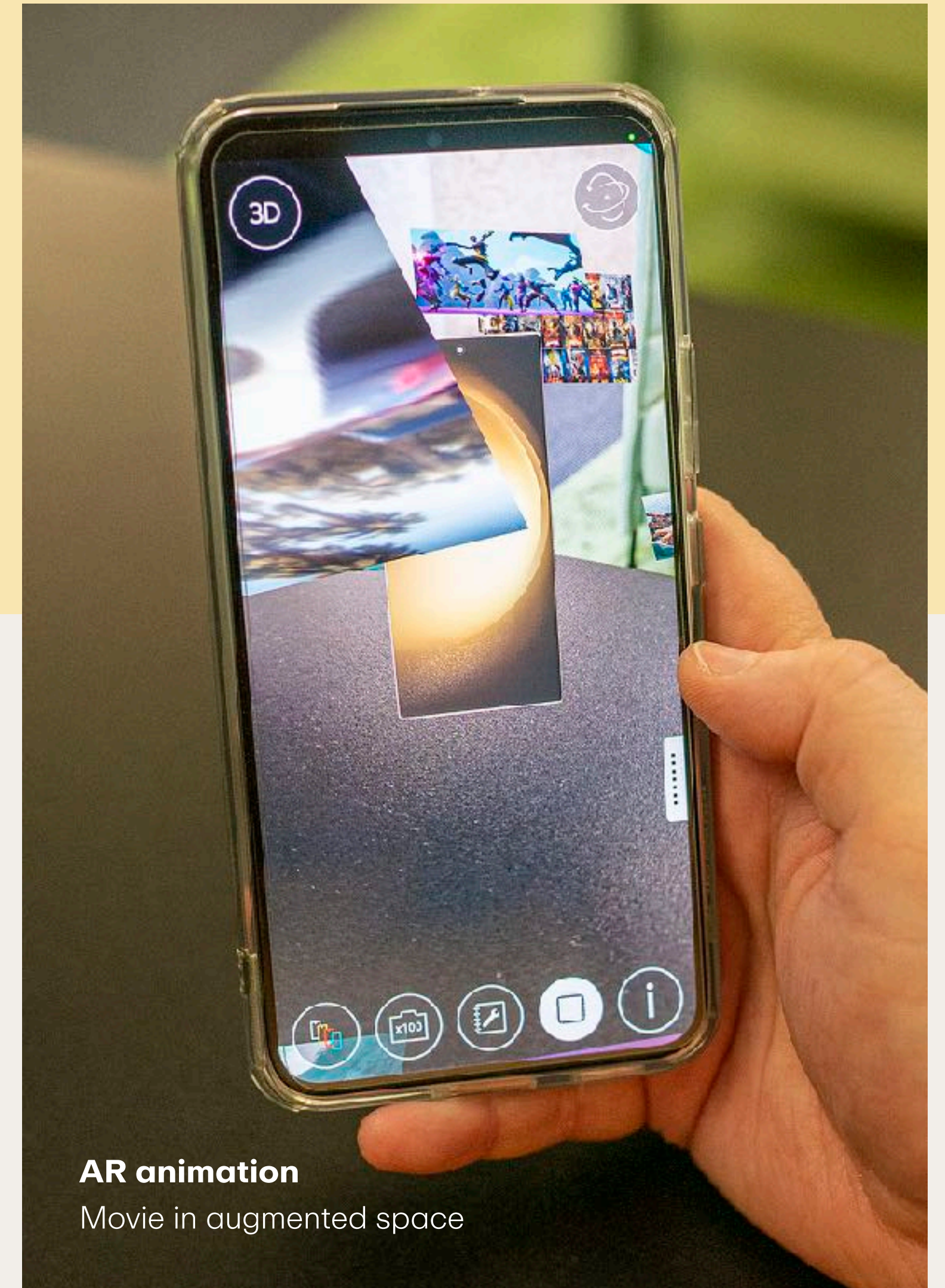




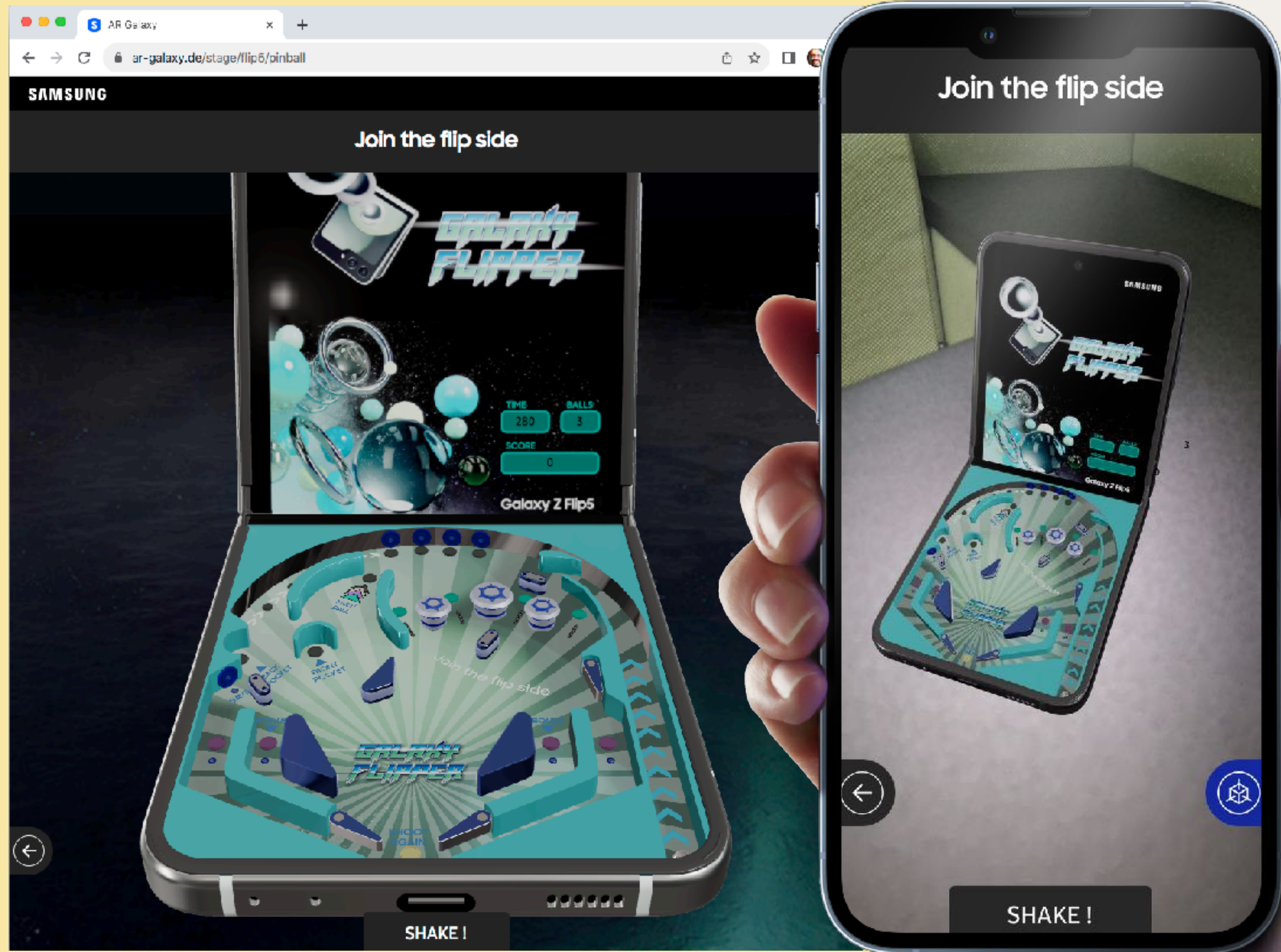
**Start screen**  
Selection of products



**AR view**  
Various interactions



**AR animation**  
Movie in augmented space



## Samsung Pinball game and filter for Galaxy Flip5

For the current product **"Samsung Galaxy Z Flip5"** a pinball game was created in real-time 3D that can be played on the website. Specially created filters for the Facebook and Instagram apps was an extra gimmick which Samsung promoted via an influencer campaign.

evrbit thus creates a comprehensive package of linked web and app applications for the B2B and B2C sectors.

# University Hospital Aachen Extended Reality Learning

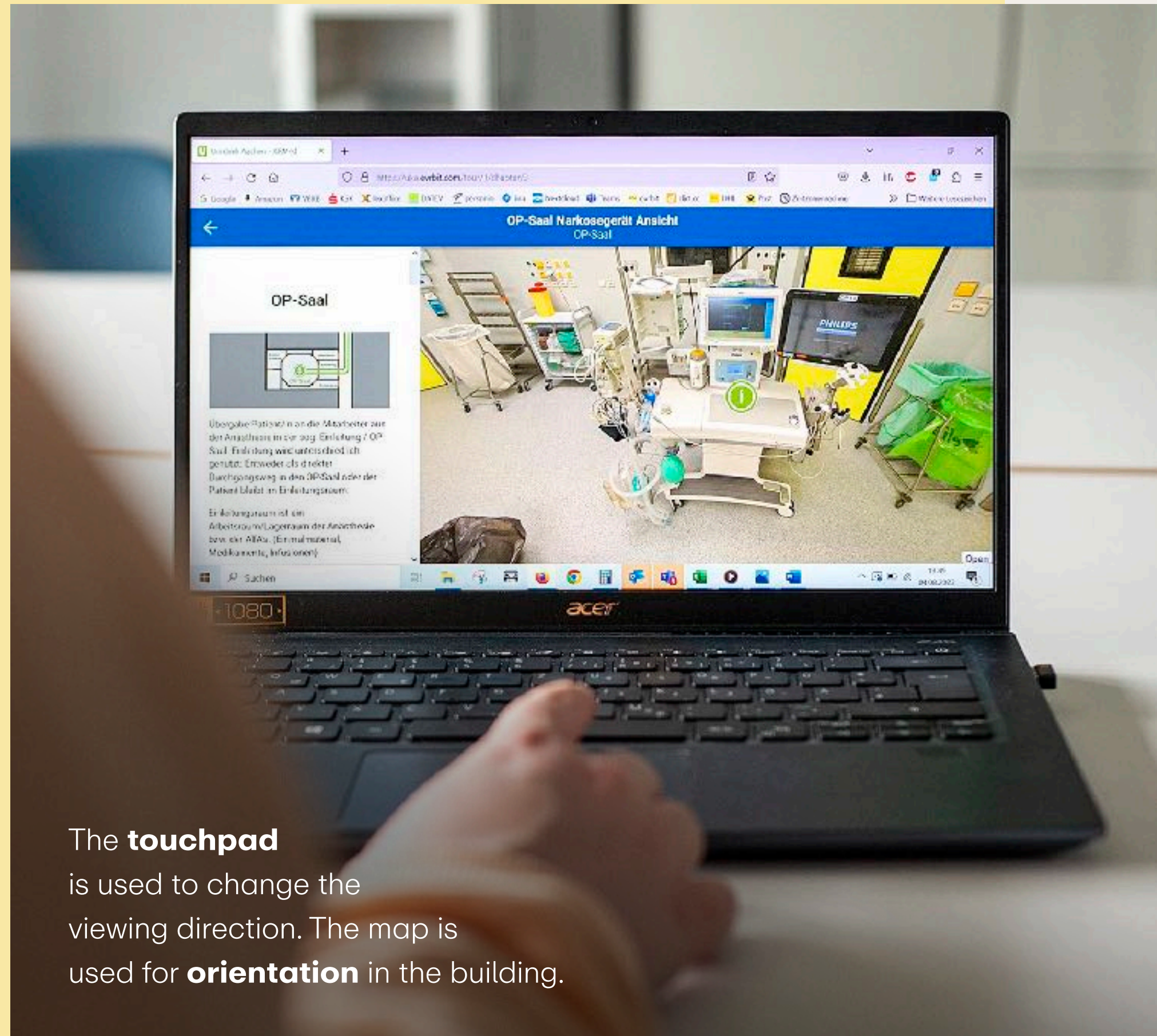
The University Hospital Aachen is a maximum care university hospital in Aachen and the region around Aachen. It is one of the largest training centers for medical and nursing professions.

For all professions in this context, the **transfer of knowledge** and skills represents a large part of everyday clinical life.

**Digitalisation** offers many new opportunities for education, training and continuing education. This makes specific qualifications more efficient and attractive. Furthermore, **virtual learning environments** provide realistic and lifelike learning opportunities without interrupting clinical workflow.



**Directional arrows** lead to the next viewpoint. Touching an **info point** opens an interactive text field.



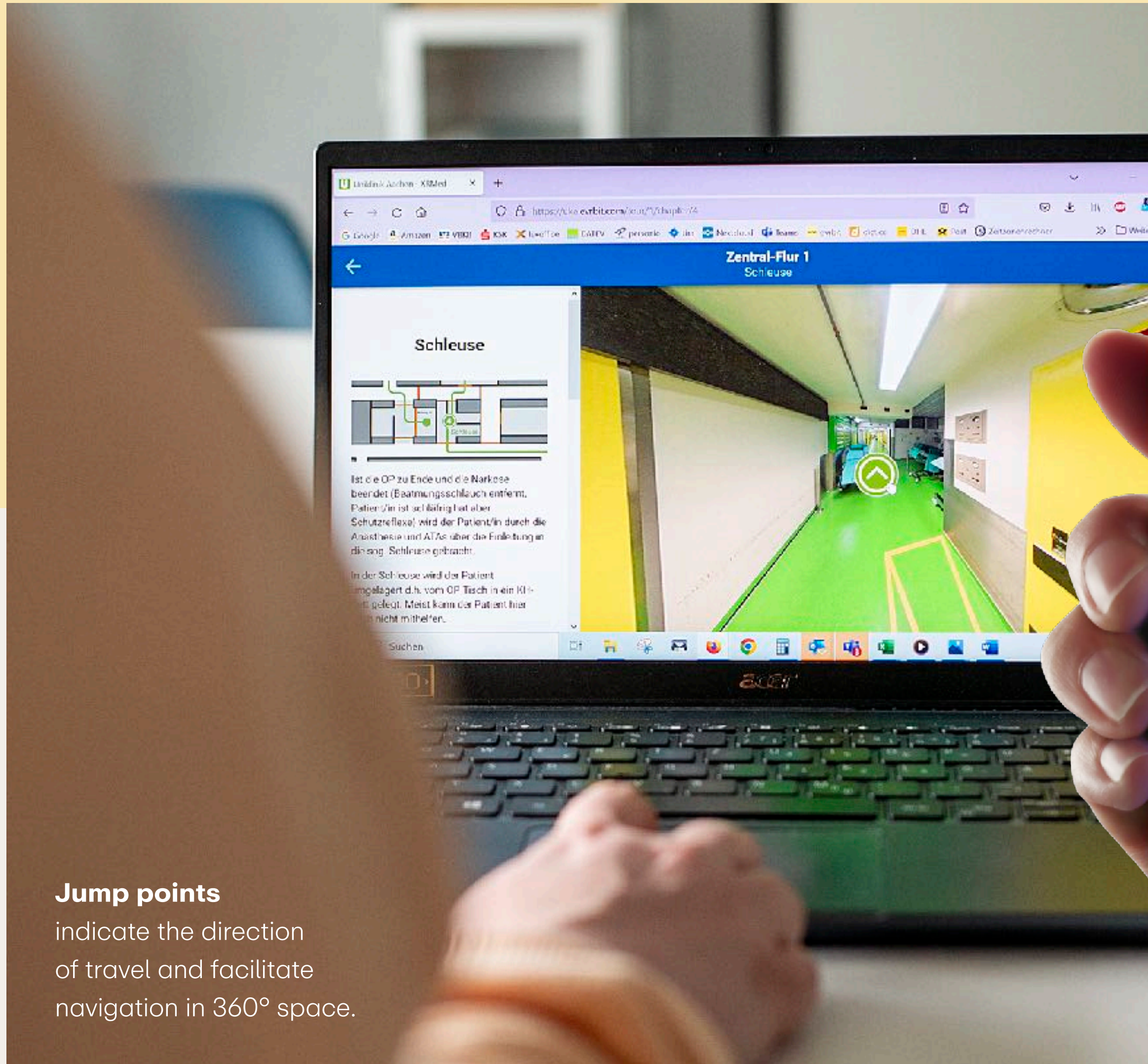
The **touchpad** is used to change the viewing direction. The map is used for **orientation** in the building.

## University Hospital Aachen Extended Reality Learning

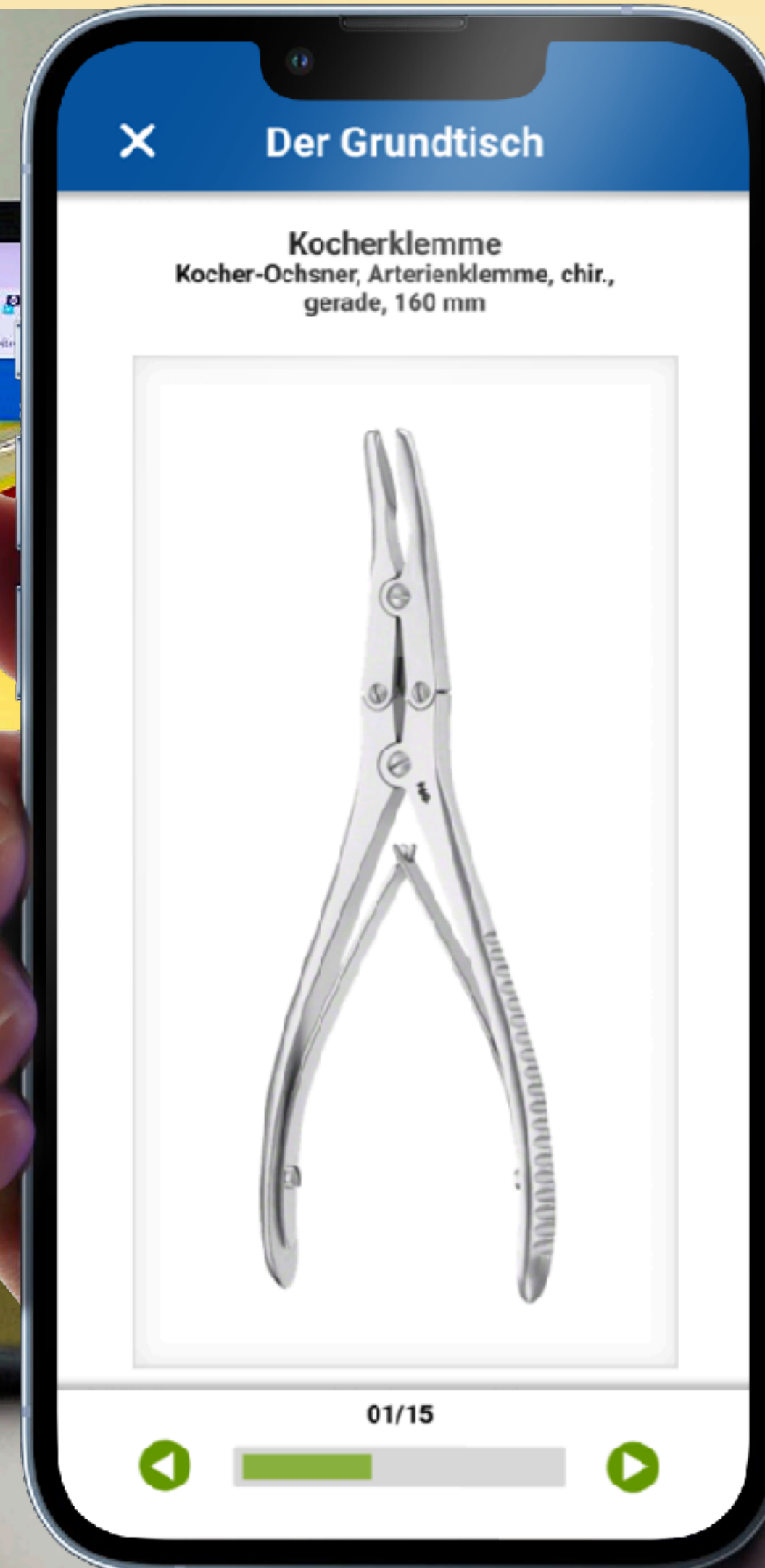
As part of an innovation partnership, evrbit developed an innovative system for knowledge transfer for the University Hospital Aachen with the xRMed project. **Hybrid learning** in the classroom and at home enables interprofessional and interdisciplinary use of the possibilities of digitalisation in a variety of ways. For example, trainees can be trained and educated highly effectively using digital learning and training modules such as **360° tours** and **interactive 3D content based on VR and AR technology** on a PC or mobile device.

A digital strategy for innovative knowledge transfer.





**Jump points** indicate the direction of travel and facilitate navigation in 360° space.



The app-based game **“The Wishing-Table”** provides important background information on working at the operating table in a playful way. It conveys necessary **learning processes** for highly structured procedures in the operating theatre, which often take place under high time pressure. The main focus is on learning to understand instruments, names, functions and areas of application. At the same time, **practice supervisors** are relieved.



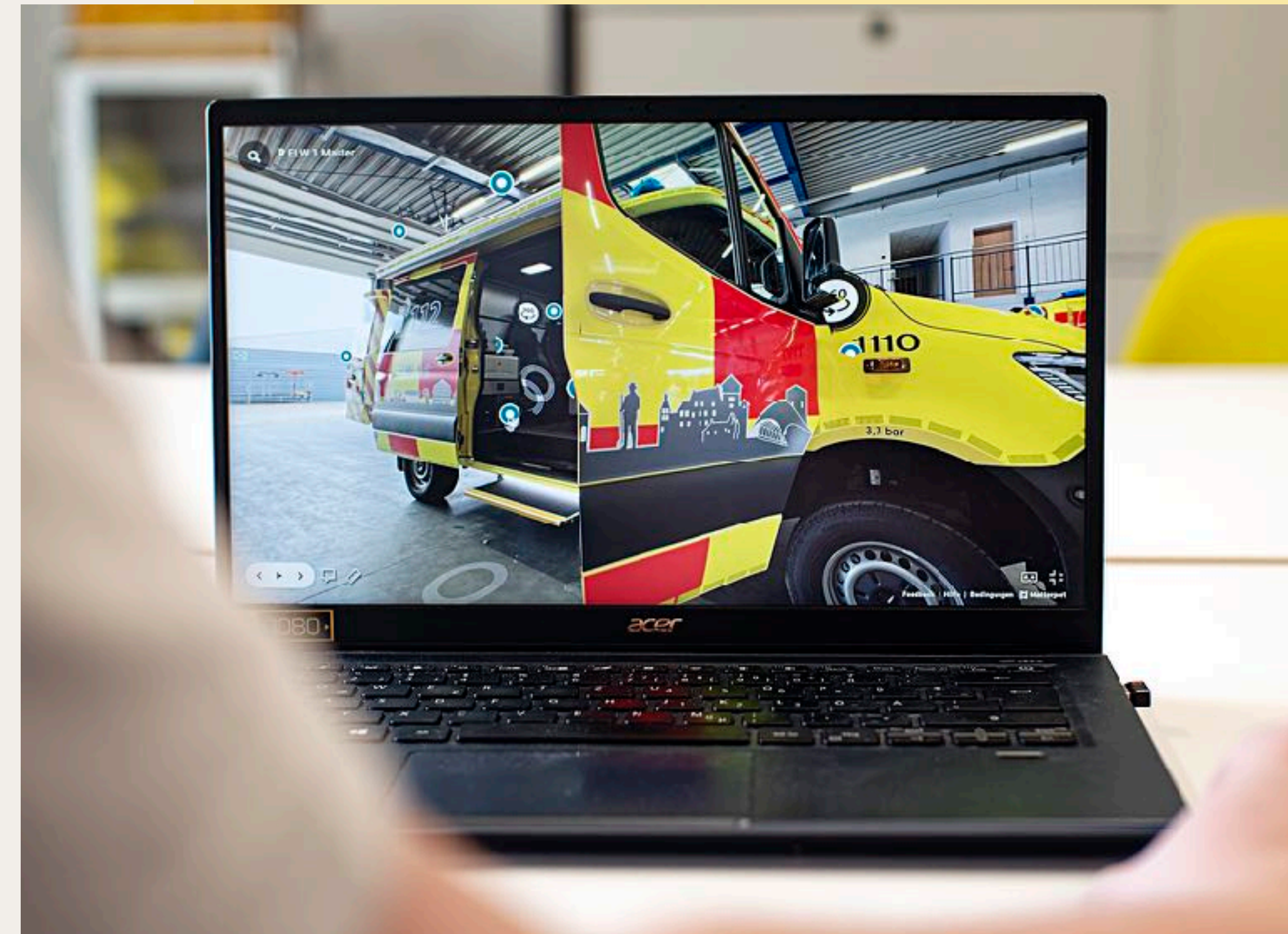
# Aachen City Region

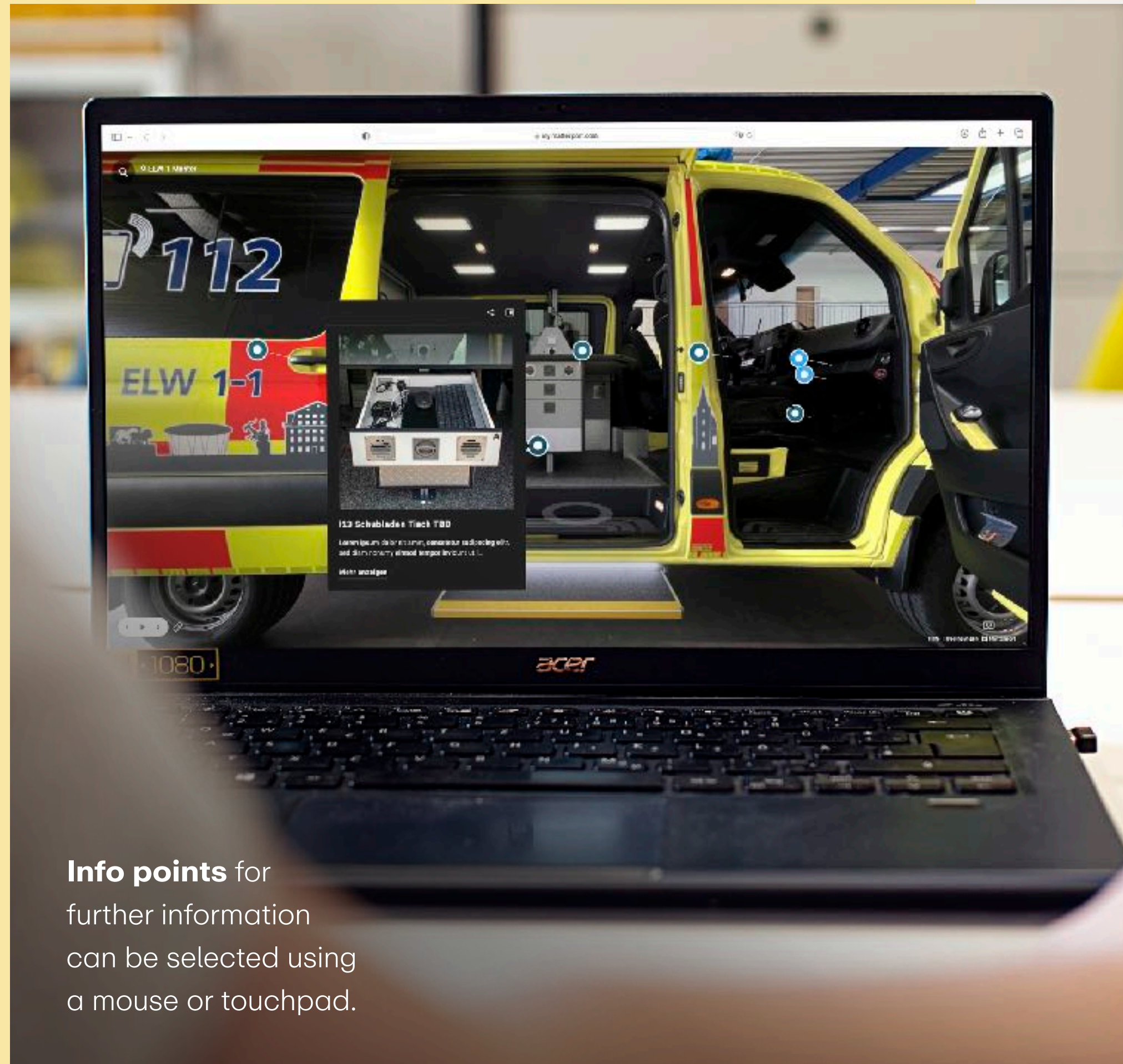
## Digital command vehicle

Around 800 employees work in shifts for the fire department of the Aachen city region. They are on duty 24/7. Shift work, rest periods and holidays are a great challenge and a considerable coordination effort for **necessary training**.

Now the fire department has received two new command vehicles. Employees need to be familiarised with the new vehicles and their special operational elements, ideally before the ambulance goes into action.

What is the best way to train the employees?



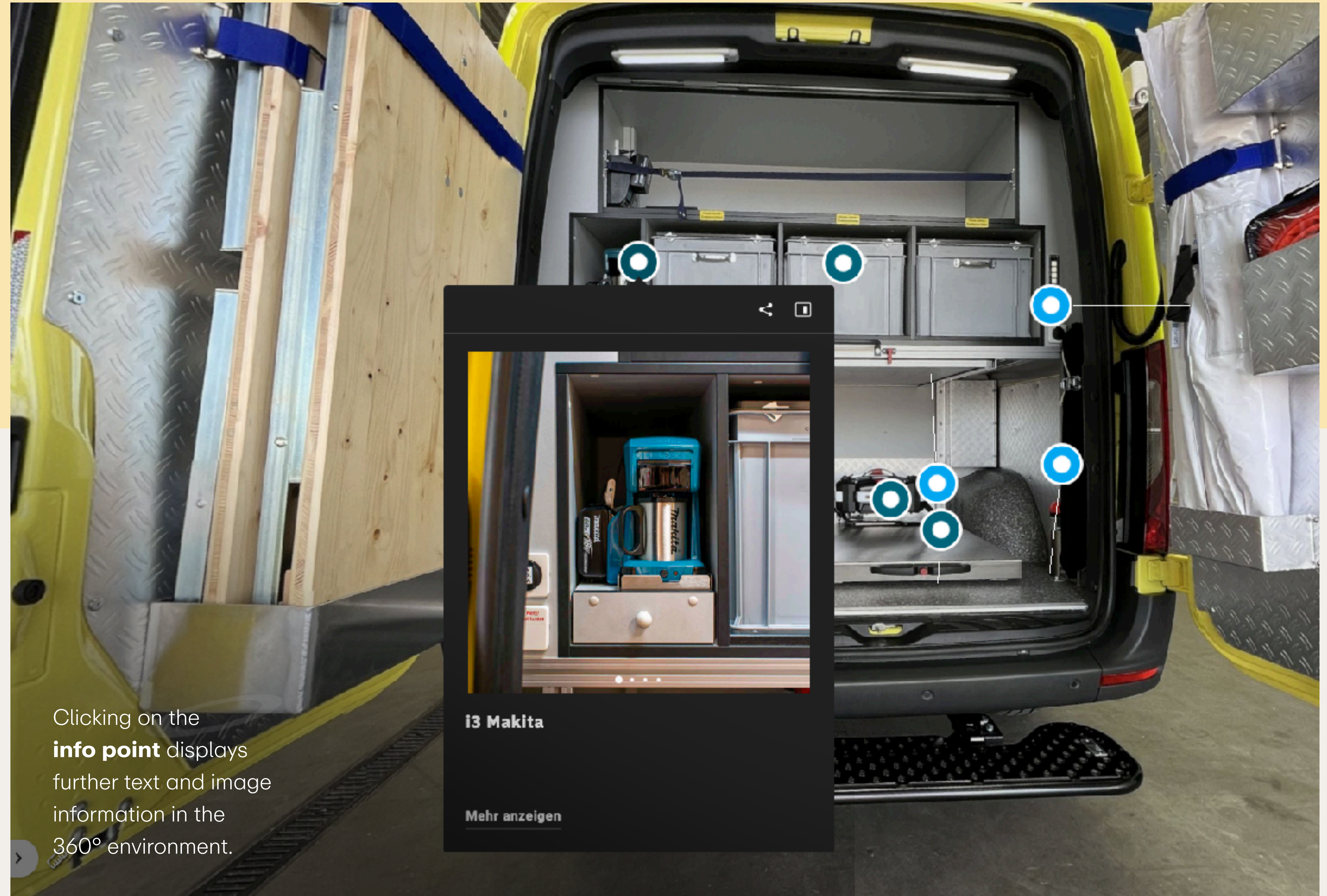
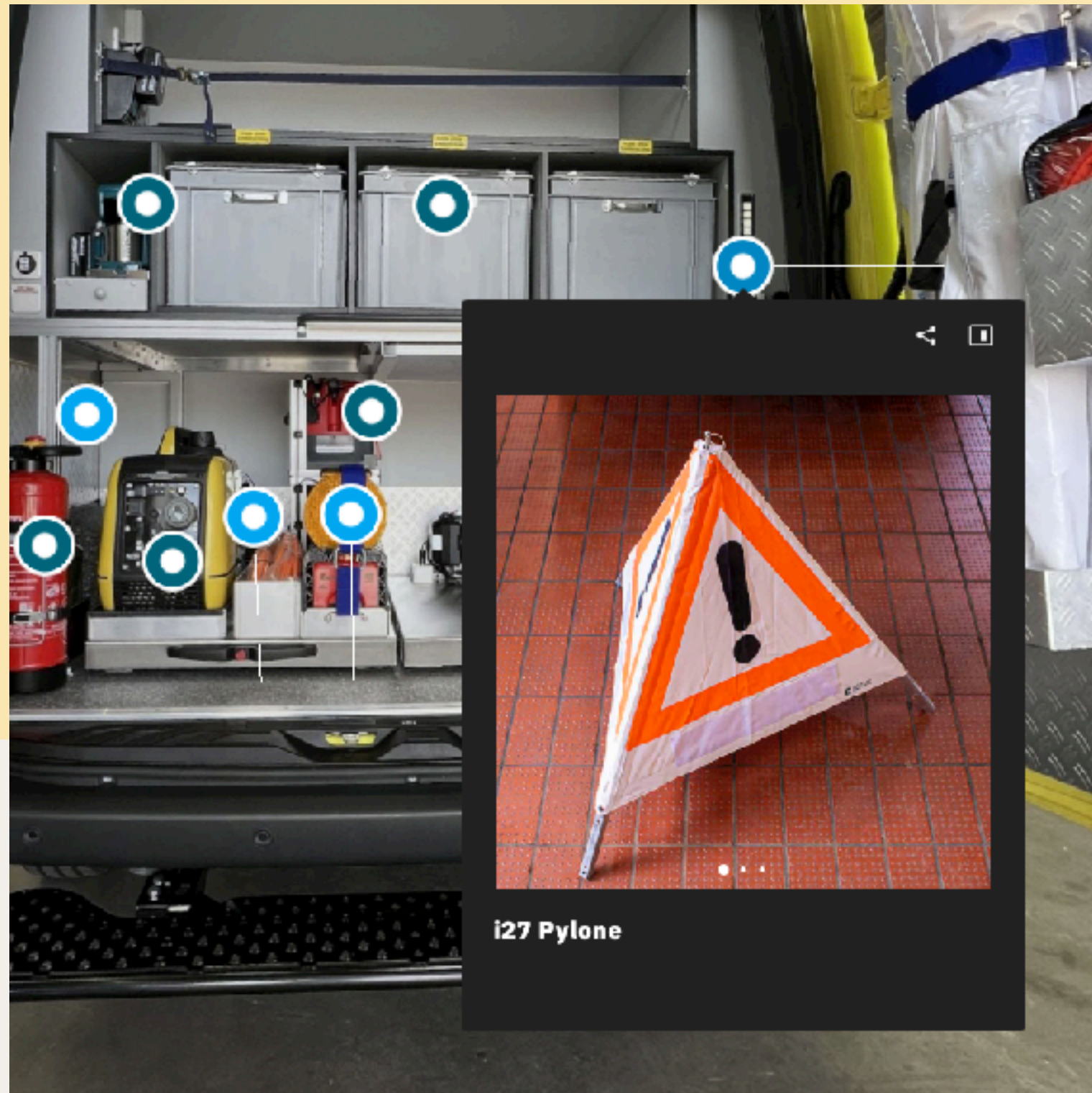


## Digital twin for training purposes

The solution is a **digital twin of the command vehicle**. Using Matterport technology, the twin is created. It provides an insight into and around the vehicle. In addition, there are **info points** at all relevant points of the ambulance that can be accessed and provide information. In some cases, they are linked to further information.

On a **homepage** that can be accessed with any device (cell phone, tablet, web), every employee can now view the new command vehicle **regardless of time and location** and is optimally informed about what is where even before the first trip.

Digital twins enable learning and training regardless of time and location. In addition, the digital twins can be used on any device, which makes access and availability much easier.



Clicking on the **info point** displays further text and image information in the 360° environment.

# Rhaetian Railway UseCase for a Digital Travel Experience

## Digitally through mountains and valleys

Rail travel is not always just about getting from one place to another. Sometimes the train ride itself is also an experience: beautiful landscapes, interesting places, special architecture. This is the case with the Bernina Express, which connects Chur in Switzerland with Tirano in Italy. The question evrbit asked itself is:

How can we make rail travel even more attractive and generate added value for rail passengers?

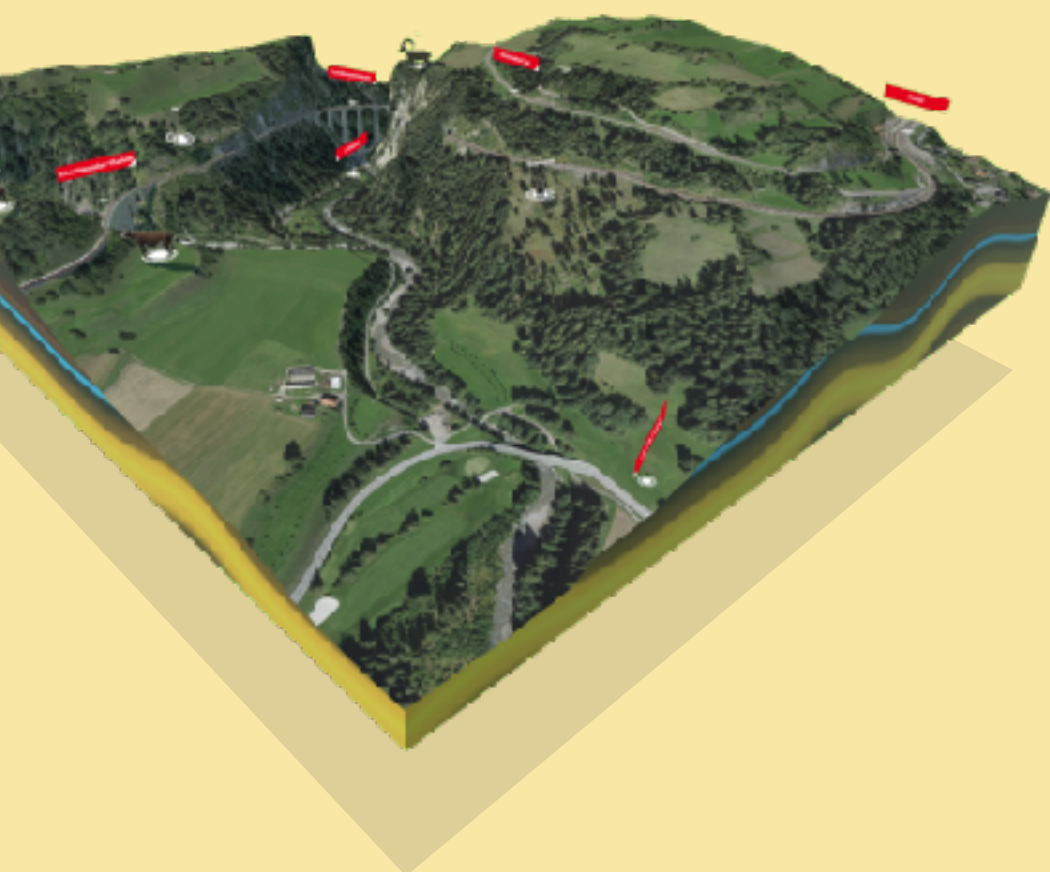
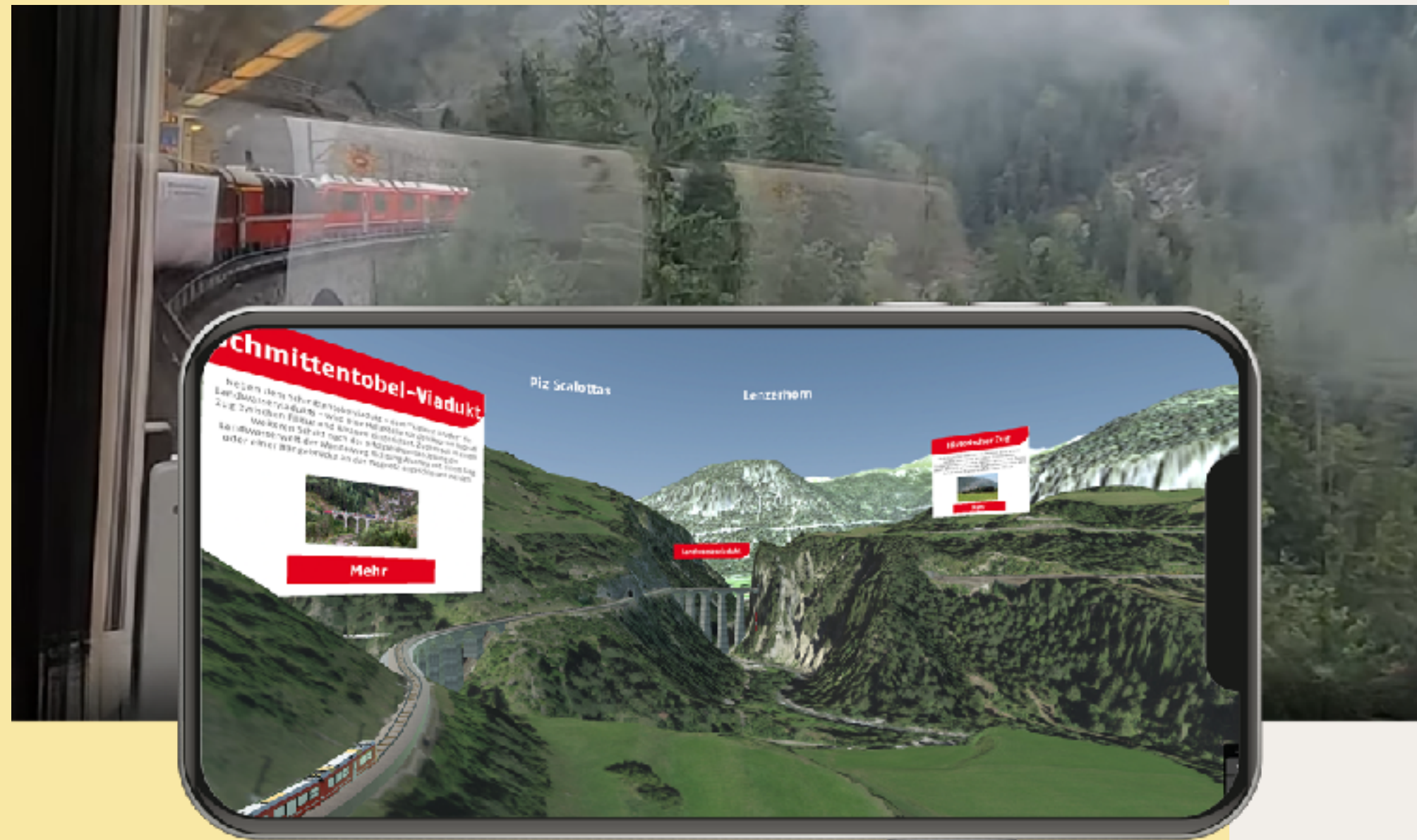


# Edutainment for travelers

evrbit offers **edutainment** for travelers in the form of innovation, information and entertainment.

Passengers can access information about the journey via their own end devices, whether **cell phone, tablet, laptop, or app**. Our edutainment offering enables a change of perspective: passengers can view the route in a diorama with the **digital twin** from the train, but also look inside the train and see the landscape from there. So-called touchpoints contain information about the train, the route, the geology or flora and fauna in text form, in **Realtime 3D** and augmented reality. Playful add-ons for children ensure that the train ride is interesting and varied for children.

A real added value for the travelers and the train journey remains positively in memory.



# Cornelsen VR@school

In 2017, Cornelsen and Samsung launched a school project together with evrbit to teach biology, physics and chemistry in a more sustainable way.

To better process the first experience with virtual reality, students of a 7th grade class were divided into teams of two: one puts on the **VR glasses**, one has the tablet. This allows for an exchange between the students, which helps with processing the content in VR.

In the **multiplayer game**, they were able to immerse themselves in a digital body using evrbit's VR glasses. The tablet showed additional information and mirrored the VR content for team play. The learning content was thus conveyed in a different way.

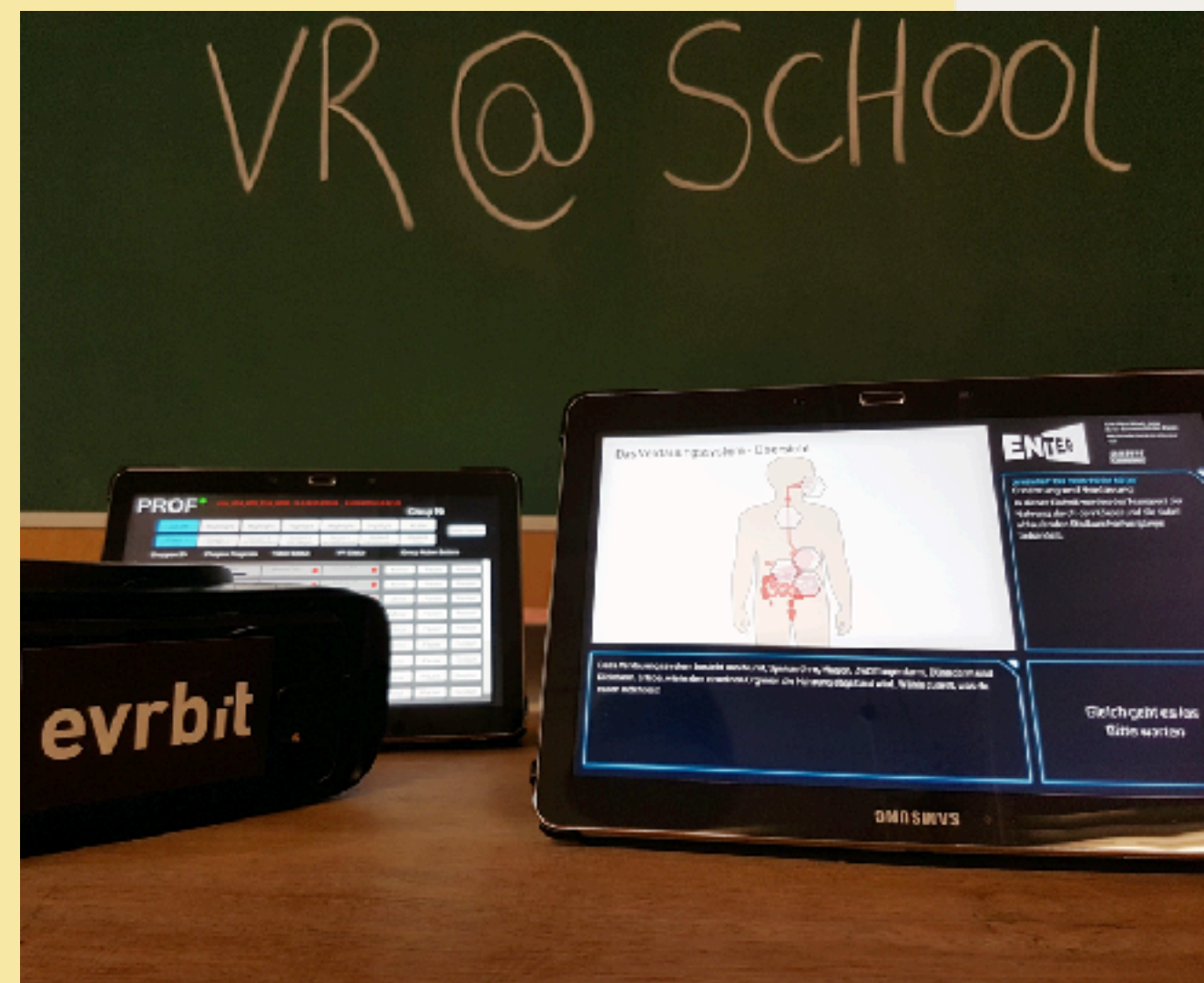


### Angela Merkel

visiting the VR@school  
school project initiated  
by Samsung and  
Cornelsen with evrbit.



The combination of **VR glasses** and **tablet** forms the hardware basis for an effective digital **learning environment**.



## What was the result of the project?

With a **"plug and play"** solution, the glasses and tablet, including the network, could be implemented quickly and easily in schools. This is an important point in the application of digital solutions and contributes significantly to their acceptance.

The project was implemented with great enthusiasm among teachers and students and also with a **lasting effect**, as the evaluation of the associated 6-month study shows. A **70% higher memory effect** was achieved due to a higher emotionalisation with the alternative teaching material.

The project was awarded as **"Best Place in Germany 2017"**.

<https://www.youtube.com/watch?v=CjRwKJ-RZYI>

Our pioneer project for digital learning.



## ElasmOcean e.V. VR application for the protection of the ocean

ElasmOcean is an association that campaigns against the climate crisis, species extinction, marine pollution and overfishing. In lectures and their educational program, they provide information about the ocean ecosystem and what each individual can do to protect the ocean. One element of the educational program is the use of **VR glasses**. Using the glasses, participants can watch a 12-minute cinematic contribution by marine biologist and shark researcher Lukas Müller, recorded with a **360° camera**. They virtually dive into the ocean and experience the effects of marine pollution.





## The VR experience connects and emotionalizes

With the **"evrsync"** technology, evrbit creates a group experience: everyone looks through their **VR glasses** individually, but is not isolated by headphones. The sound is transmitted through loudspeakers, matching the **synchronous playback** of the content in the VR glasses. Participants are not alone with their impressions.

The **simple handling** makes the VR kit suitable for everyday use and is even used in school classes from the 3rd school year.

The use of the VR glasses and the realistic experience of the marine ecosystem makes the experience more emotional and increases the commitment to climate protection.

# Wüsthof

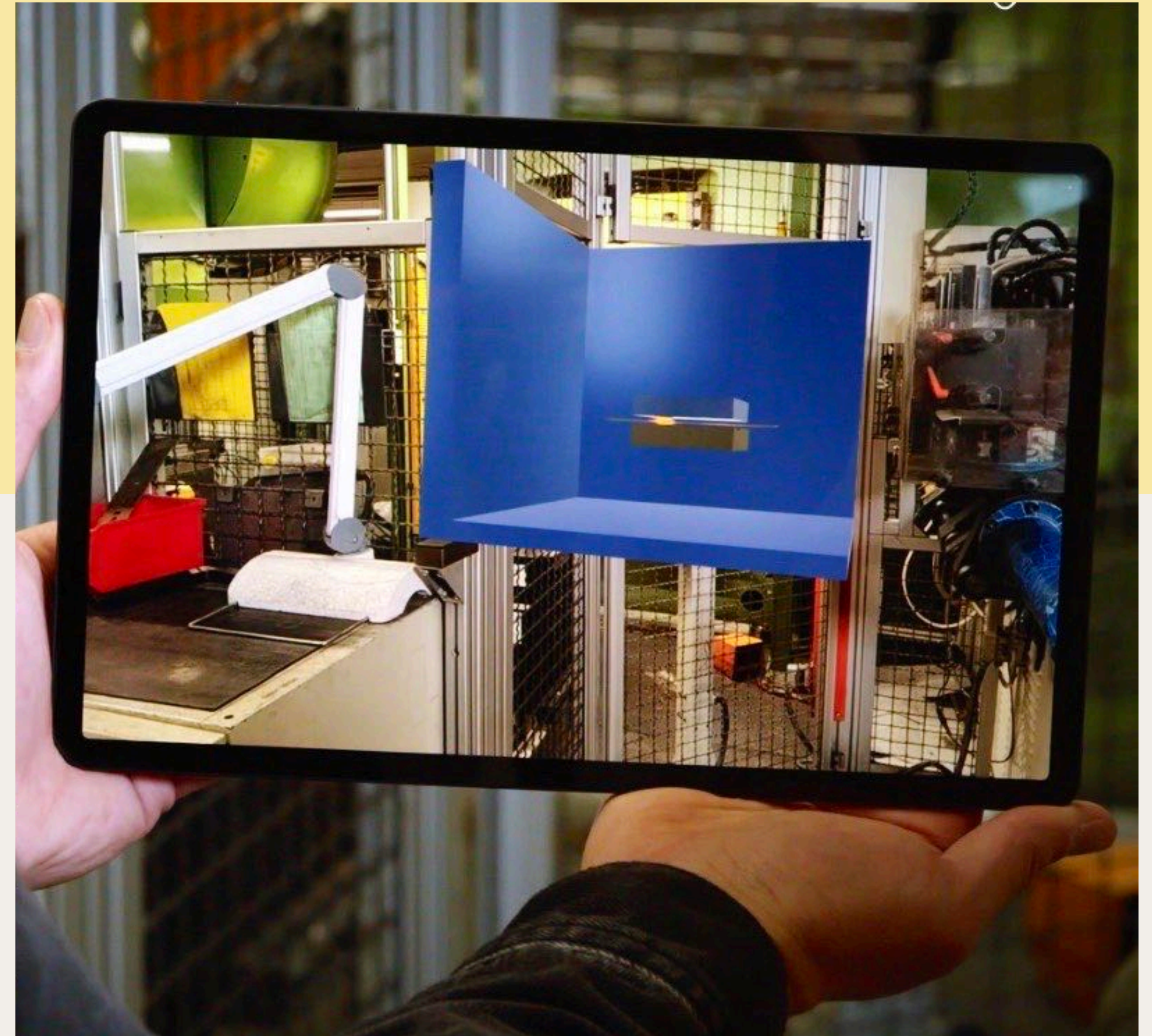
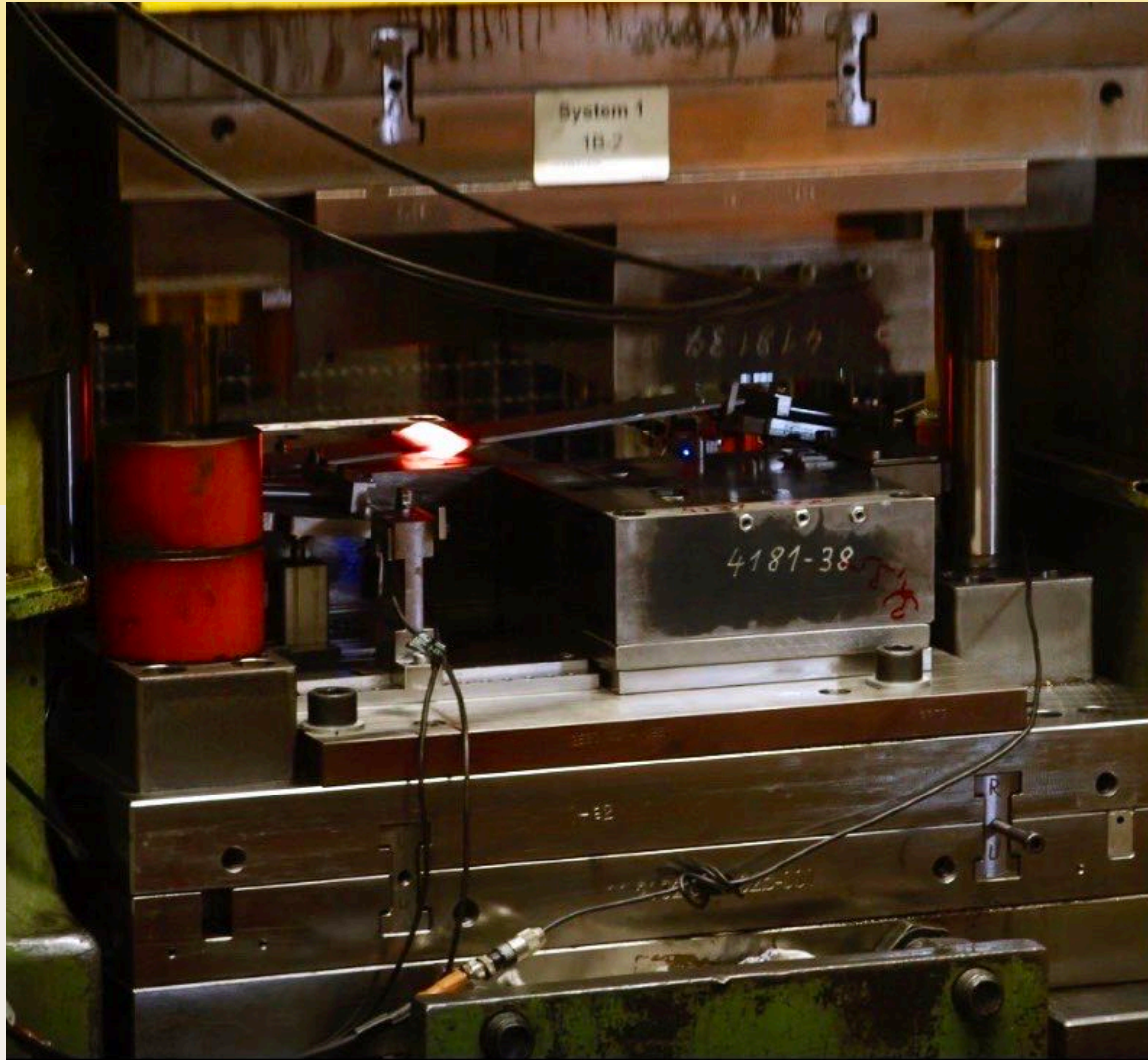
## Factory tour in augmented reality

In cooperation with Herzberg Media, evrbit has created a very special **augmented reality tour** for the knife manufacturer Wüsthof. Visitors are equipped with a tablet and the factory tour starts, for which company founder Abraham Wüsthof was brought to life by means of a hologram. He guides visitors through the **production facility** and shows the **production process** of a kitchen knife.

The AR tour enables a tour of the factory buildings. By means of projections, visitors gain insights into machines and production processes that are otherwise invisible, accompanied by the exciting narrations of the company founder Abraham Wüsthof.

**AR enables insights into worlds that are otherwise closed.**



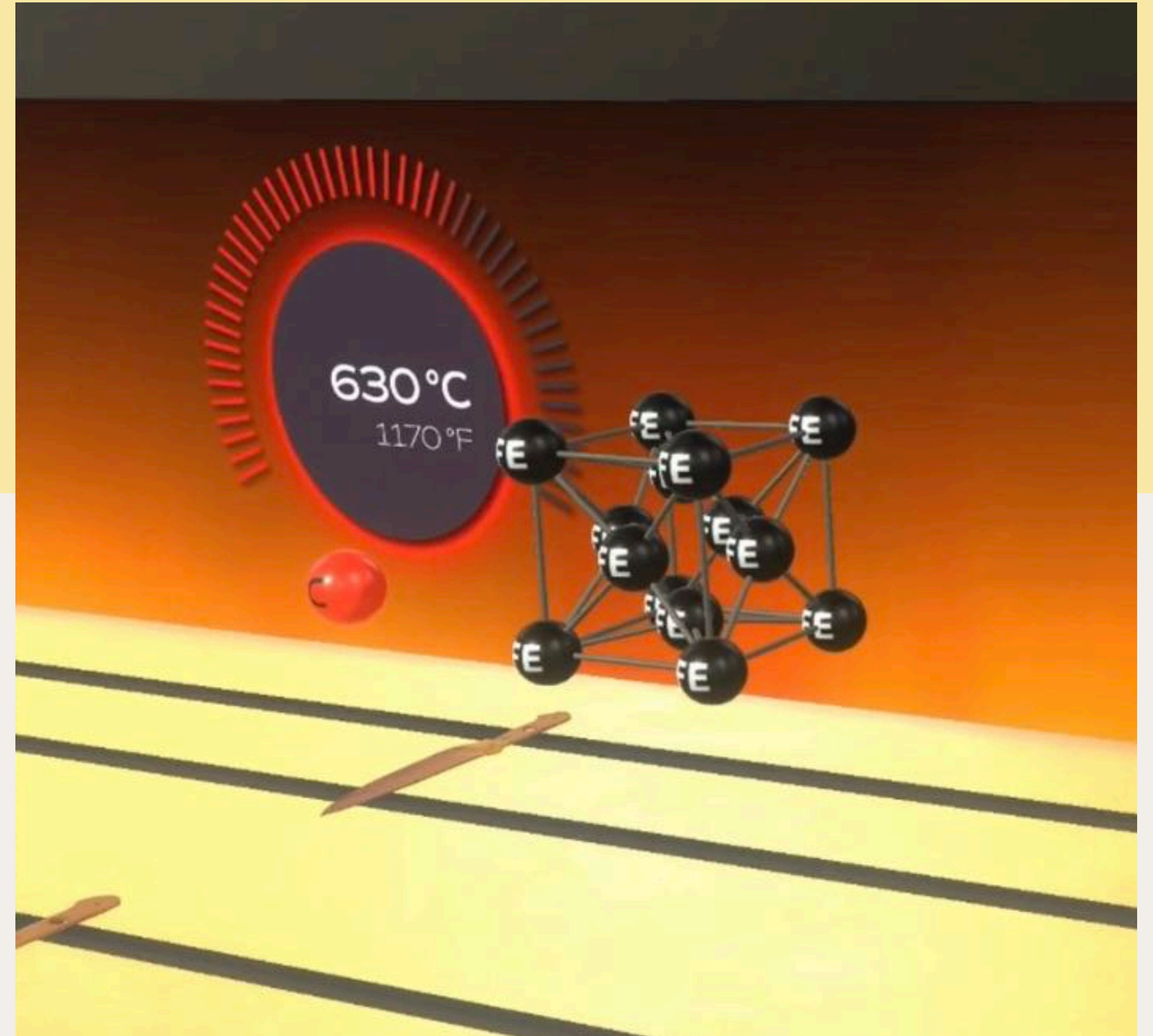


Digital learning and training modules

What can we show?



Digital learning and training modules



What can we show?

→ **Thank you for the attention**

**Lisa Helisch**  
lh@evrbit.com

**evrbit GmbH**  
Lichtstraße 25  
50825 Cologne, Germany  
+49.221.34662091

evrbit.com  
instagram.com/evrbit

evrbit