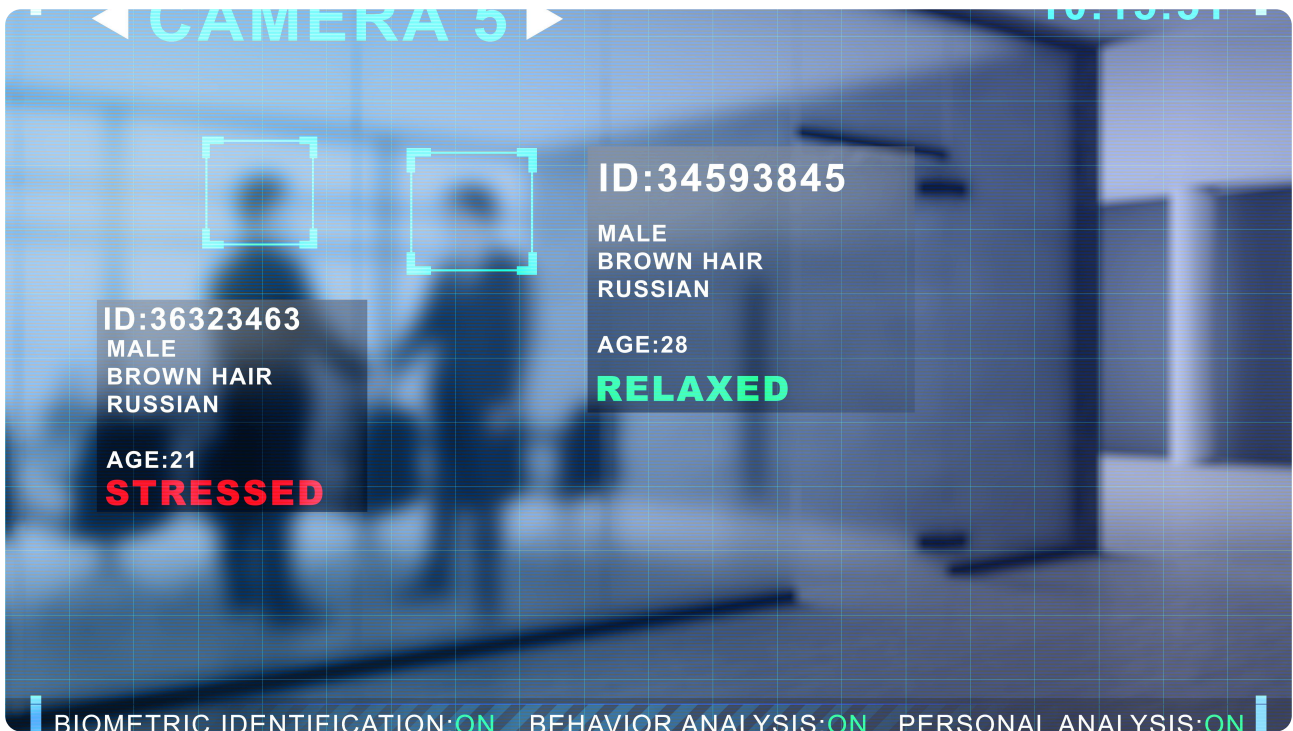


NEWS

When the glass starts to think

Living surfaces that see, think, communicate and change the way we look at the world

30 April 2026, Tobias Engl



It was a moment straight out of a science fiction movie: in the middle of Times Square in New York, a giant polar bear appeared to burst out of a billboard ... without 3D glasses, without a projector, without a technical trick. Hundreds of thousands filmed, shared and marveled at this naked eye 3D LED screen, which marked a turning point in our perception of displays. Today, in April 2026, screens are no longer just windows to digital content. They have evolved into intelligent surfaces that inscribe themselves into the architecture, react to their surroundings and seamlessly interweave with the Internet of Things (IoT). The key question in the industry is no longer how big a screen needs to be, but how smart the surface can become.

This development is based on fascinating technology. Transparent displays work without an opaque back wall, so that light and lines of sight can pass through the surface unhindered. An image is only created where pixels are actively illuminated. The technological spectrum ranges from LED mesh systems for façades and wafer-thin nano-foils for shop windows to high-resolution transparent OLEDs for premium retail. Industry giants such as LEDKUL are now combining flexible panels with AI-controlled hardware, while providers such as SeeThruDisplays are revolutionizing the market with network models that allow owners to feed their spaces directly into advertising ecosystems.

This is where we come in with ScreenWay for holistic digital signage strategies and accompany the process of transformation from a passive surface to an intelligent player. With our ScreenWay Intelligence Suite, we create turnkey solutions that seamlessly combine hardware innovations such as LED films with GDPR-compliant edge AI. We not only support you in selecting the right technology, but also implement the necessary data infrastructure so that your display can "think" from the very first second.

To make this development strategically tangible, it helps to take a look at the five-stage model of integrated intelligence. While the basic level is still based on passive content, today we are increasingly reaching the level of autonomous AI displays. At this level, the sensor technology recognizes target groups completely anonymously, selects content predictively and learns continuously. Laying the infrastructure for networked administration today saves expensive retrofitting later on. ScreenWay provides the modular interfaces to upgrade existing glass surfaces step by step.

The fields of application for this transparent intelligence are already a reality. In retail, LED nano-foils transform every shop window into a medium that allows products to be seen in the background while AI-controlled recommendations float in front of them. In museums, transparent OLEDs allow antique objects to be overlaid with digital reconstructions without obscuring the exhibits. Cityscapes are also changing rapidly: by 2027, over 80,000 transparent displays will be installed in China alone. The market is growing by over 15 percent annually and is expected to reach a volume of 19.5 billion US dollars by 2033. The naked eye 3D effect in particular acts as an attention booster, with precisely calculated content sequences generating enormous viral power.

The combination of these technologies will create completely new scenarios. We are already seeing AI shop windows that react to the demographics of passers-by and smart building glass walls that display live room data. For decision-makers, the choice of technology is crucial: while LED mesh is ideal for large façades, micro-LED impresses in the high-end sector with transparency values of up to 90 percent.

Despite the technological enthusiasm, regulatory aspects must be taken into account. On-device processing without data storage is the gold standard for legally compliant installations. The cost structures have also differentiated - from cheaper mesh systems from 500 euros per square meter to high-end solutions in the five-digit range. However, the focus is increasingly shifting towards the screen-as-a-service model. The surface ceases to be a mere output medium - it becomes an actor in a data-driven experience space. The glass is already thinking. With ScreenWay, you can ensure that your surfaces are legally compliant and speak the right language!