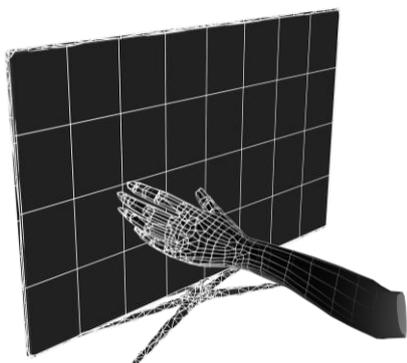# Smart Retail with Ultrasound

German sensor technology company Toposens will present solutions for Smart Retail that are based on ultrasound at EuroShop 2017. So far, ultrasound technology has only been known from the animal world (bats use ultrasound echolocation to detect their surroundings) or in precise distance measurement applications in the industry. The startup Toposens is going to change this, as they invented the first 3D Ultrasound Sensor, which can be used to detect objects and people in 3D in real time.

In the retail environment, 3D ultrasound sensors enable improved interaction with customers.
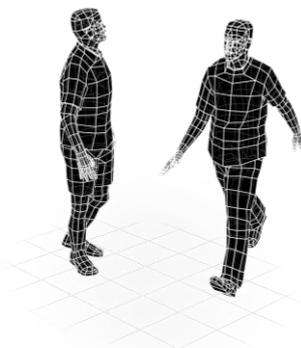
3D Ultrasound Gesture Control

By integrating Toposens sensors into displays, retailers can improve interaction between customers and technology in the store. The sensors can be used, e.g. to navigate through leaflets or menus, to get further information on products or to use gamification to present products and intensify the relationship with the customer.

Advantages over existing gesture control sensors lie in the small size of the sensor, combined with low-power consumption and no need of external data processing. Further, the sensor is very robust and can see in the dark, as well as through all kinds of lighting conditions and even through dust and dirt. It does not intrude into people's privacy, as no personal feature are identified by ultrasound!

3D Ultrasound Customer Flow Analytics

The Toposens sensor can be used to detect, count and track people. This information can be used to analyze the customer flow through the retail store. The precise position of individual people can be visualized and heat maps can be based upon this data.

The 3D ultrasound sensor does not need any active tracker or consent by the customer. It is a passive system that is characterized by its great precision, high robustness and the fact that it protects people's privacy by not identifying their personal features.

At EuroShop 2017, Toposens will show a live demo of their gesture control sensor to visualize how ultrasound can be used for interaction with retail customers! Visit Toposens at Hall 3 Stand A20-11 or on www.toposens.com!