

LiDAR-based visitor guidance system ensures a stress-free vacation experience at the North Sea

OVERVIEW

Overtourism is not only a problem in Venice or Barcelona; German coastal regions also struggle with large numbers of tourists. To better distribute visitors along the North Sea coast, the umbrella marketing organization Die Nordsee GmbH and people counting specialist EvoCount rely on Blickfeld LiDAR sensors. The weatherproof sensor technology anonymously counts beach visitors and visualizes the occupancy rate at tourist hotspots. Guests can thus inform themselves before a trip and, if necessary, choose an alternative destination with fewer visitors.

CHALLENGE

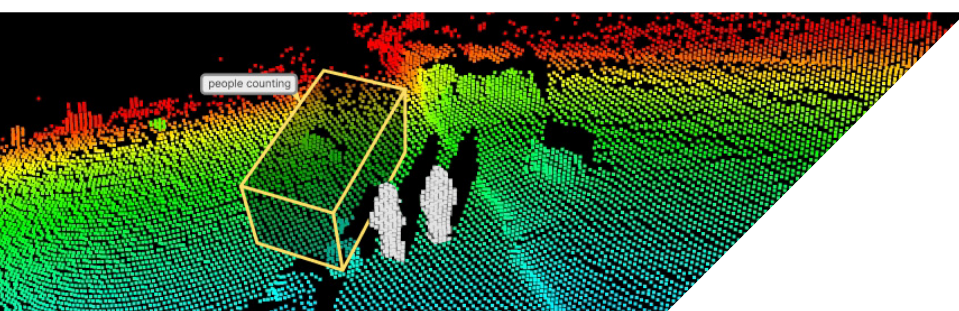
There were several requirements for such a sensor system: The data had to be recorded in compliance with data protection regulations since the sensor system was installed in public spaces. Furthermore, the system had to be weather-resistant and operational regardless of light conditions. In addition, a large field of view was required since the passages, for example, to the beach, are up to fifty meters wide.

SOLUTION

LiDAR sensors do not collect personal information and provide stable data regardless of weather conditions. In addition, the Blickfeld Cube 1 has a wide field of view and can cover large areas with just a few sensors.

Nearly 60 sensors are now installed at eight different locations at the North Sea. About half of these sensors overlook parking lots and intersections to record occupancy via vehicle traffic. The other half of the sensors count visitors on the beach or boardwalks.

The sensors capture a continuous live stream of 3D data, in which the corresponding perception software detects and counts objects such as cars, cyclists, and pedestrians. The resulting count data is fed into an evaluation platform, where it can be displayed, analyzed, and used for further actions, such as occupancy indicators on Die Nordsee GmbH's website.





BENEFITS

- Anonymous detection of beach visitors
- Reliable data collection regardless of weather or lighting conditions
- Large areas covered
- Low power consumption
- Flexible installation options

RESULTS

The first summer after the system installation already shows excellent results: Website usage has risen by 300% since the occupancy indicators have been online. Guests thus inform themselves in advance how many other people they would have to share the beach with. The guest cards used by the destinations also provide information about the project's success - the municipalities report increasing access rates in the partner locations, which means that the visitor guidance system is working.

“Thanks to the low power consumption of the Blickfeld sensors, we were able to set up a self-sufficient people counting site at the North Sea, where the sensor is powered by solar energy. Especially for tourist destinations that may not be fully developed, this is a game changer!”

Lukas Baldischwieler, Head of Sales at EvoCount

OUTLOOK

The sensor system at the North Sea will count visitors for the next four years, and it will be interesting to see how the effects develop over several summers. Die Nordsee GmbH is already very satisfied with the first season's results stemming from LiDAR-based visitor guidance.