USE CASE

People Flow Analysis on Campus Areas

AT A GLANCE

- measurement and analysis of people flow
- discovery of optimization potential

necessary detours and it can be derived where the signage should be improved.

Moreover, lendable bikes which are a popular means of transport on campus areas can be tracked. These bikes are used by several people which means they are on the move most of the time and their parking position changes regularly. In order to find a vacant bike when needed, their recent locations can be shown on a digital map. Another application is measuring the occupancy of the cafeteria and displaying the estimated waiting time in a mobile app.

PROBLEM DEFINITION

Campuses usually extend over large areas. When a building is located far from public transportation stops or people have to visit several buildings on different ends of the campus during the day, getting from one place to another can take a lot of time.

SOLUTION

With a tracking solution, the movement of people on the campus area can be measured. It can be uncovered which routes people commonly take and how strongly particular paths are frequented at different times.

These insights reveal optimization potential. When the analysis shows, for example, that a lot of people walk across the whole campus every day to reach their building, the introduction of an additional bus or another bus stop can make sense. This way, people will reach their destination much quicker. Furthermore, the data can uncover where people take un-

TECHNICAL IMPLEMENTATION

infsoft Locator Nodes which are installed throughout the area receive Wi-Fi and Bluetooth signals of the smartphones carried along by people. The data is intelligently processed in the infsoft LocAware platform® and displayed in infsoft Analytics in the form of diagrams and graphics. This way, the position of people at different times and therefore their movements on the campus can be visualized and analyzed.

Additionally, infsoft Locator Nodes equipped with a GPS module are installed in buses. The location of the Locator Nodes can be determined via GPS and people flow can be tracked flexibly beyond the borders of the campus area. At the same time, the occupancy of the bus can be determined.

In order to track the campus bikes, they are equipped with Bluetooth Low Energy beacons. infsoft Locator Nodes receive their signals, send them to the infsoft LocAware platform® and the position can then be accessed via a mobile app.