

Accurate navigation system for the blind and visually impaired to improve public services

UNITED KINGDOM/WAYMAP ORIENTATION APP

Waymap, an IT start-up company based in the Greater London area of the United Kingdom, enables both indoor and outdoor orientation for the blind and visually impaired with a location accuracy of one meter. Users choose their destination on a smartphone app and the route is automatically created, considering their preferences for mobility, routing, and instructions. In 2021, Waymap worked with public transport companies in the United Kingdom and the United States, who pay for these services. The app is free for the end user.

Problem targeted

Navigating indoor and outdoor spaces is a challenge for people who are blind or have a visual impairment. Moreover, other approaches such as GPS and beacons often lack accuracy and reliability.

Solution, innovation, and impact

Waymap is targeted towards public transport companies that offer it as a personal navigation application to their customers with disabilities for free. The app guides and supports people both indoors and outdoors while delivering real-time orientation. It has an accuracy of up to one metre. Waymap supports anyone whether they have a disability or are simply unfamiliar with the location or lack confidence in trav-



Using the highly accurate personal navigation map.

“Waymap will change lives by making our breakthrough technology available to as many people we can.”

Ethan Brooks, Director of External Affairs of Waymap

elling. It uses the existing sensors on smartphones that measure movement, direction, and elevation to navigate via dead-reckoning, a process of calculating current position. This technology has the advantage of requiring no technical infrastructure on location, such as beacons. Now available at five locations in the United Kingdom and in North America, 50 people are currently using the app; and a grand scale rollout is planned in the Washington, DC, area later in 2021. Waymap is following the CTA Standard 2076, which specifies requirements for the design of inclusive audio-based network navigation systems.

Outlook, transferability, and funding

Waymap's business model charges transit authorities an initial fee to map the venue and then a monthly subscription fee for continuing access to the technology. The application is free for users and is available on both the Apple App Store and Google Play. By 2024, Waymap aims to achieve annual revenues of over €35 million, focusing on contracts with city transport networks in cities across North America and Europe. Waymap also plans to partner with health care providers, museums, offices, and universities.

FACTS & FIGURES

Start: 2019

- 50 people were using the app in mid-2021 during the pilot phase.
- In 2021, Waymap was working with five public transport providers in the UK and the US.
- *A project related to ICT.*



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