Intelligent Bus Shelter as an example of the novel Smart City technology integration

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Piotr Wróblewski

Master of Science - IT Management - Polish- Japanese Academy of Information Technology

Co- founder of Applink sp. z o.o. CTO since 2007 - Applink sp. z o.o. -Poland's no 1 Digital Signage project's integrator for both indoor and outdoor applications. On the market since 2007 with over 50 000 screens installed around Europe, Africa and Asia.





Project Title: Intelligent Bus Shelter as an example of the novel Smart City technology integration

Project completed in 2023 with a Demonstrative Version of Interactive Bus Shelter installed in company's location in Warsaw.

Intelligent Bus shelters forefront of the modern urban development

In the evolving landscape of the near future Smart Cities such shelters will play vital role in redefining public transport experiences while integrating technology into the fabric of urban living.



General Public Use



Charging point for mobile devices (smart phones)

Internet Access PointPaid or Free of Charge Wifi point - depending on application and requirements

Aleje Jerozolimskie



Charging point for personal urban transportation means (e.g. scooters)

Passenger's Use

- Passenger info done with **E INK** technology. An E-ink display is a screen that aims to replicate the experience of reading and writing on paper. Ensures highest power efficiency - uses power only when changing content,
- Timetable information, taking into account the estimated current travel time, depending on traffic intensity and unforeseen events, including transfers, with a search function for the fastest connections,
- Bus/tram number information for approaching public transport vehicles.



Passenger's Use

- Information on the current load of approaching public transport vehicles, especially during peak hours,
- Stop request signal and taxi service call feature,
- Assistant for passengers with disabilities, providing additional information and warnings, as well as conveying the need for assistance during boarding a vehicle,
- Ticket vending machine offering electronic tickets for travel.





Municipal Use

Weather station with air quality monitoring and warnings about approaching atmospheric phenomena,

Monitoring station controlling urban lighting in a specified area, also serving as part of the notification system for medical and law enforcement services,

Automated External Defibrillator - public access (done already in the City of Warsaw in the bus shelter),

Disinfection systems - nozzles built in the wall on the shelter (project implemented in 52 location in the City of Warsaw.



Advertiser's Use

- Audience measuring capabilities using smart cameras combined with AI used to strictly define types of potential end user (gender, age, focus time etc),
- Other reporting and information services with the possibility of future implementation.

Children and the second



Thank you for your attention!

Contact us if you have any needs for modern LED screens and smart cities solutions.





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