



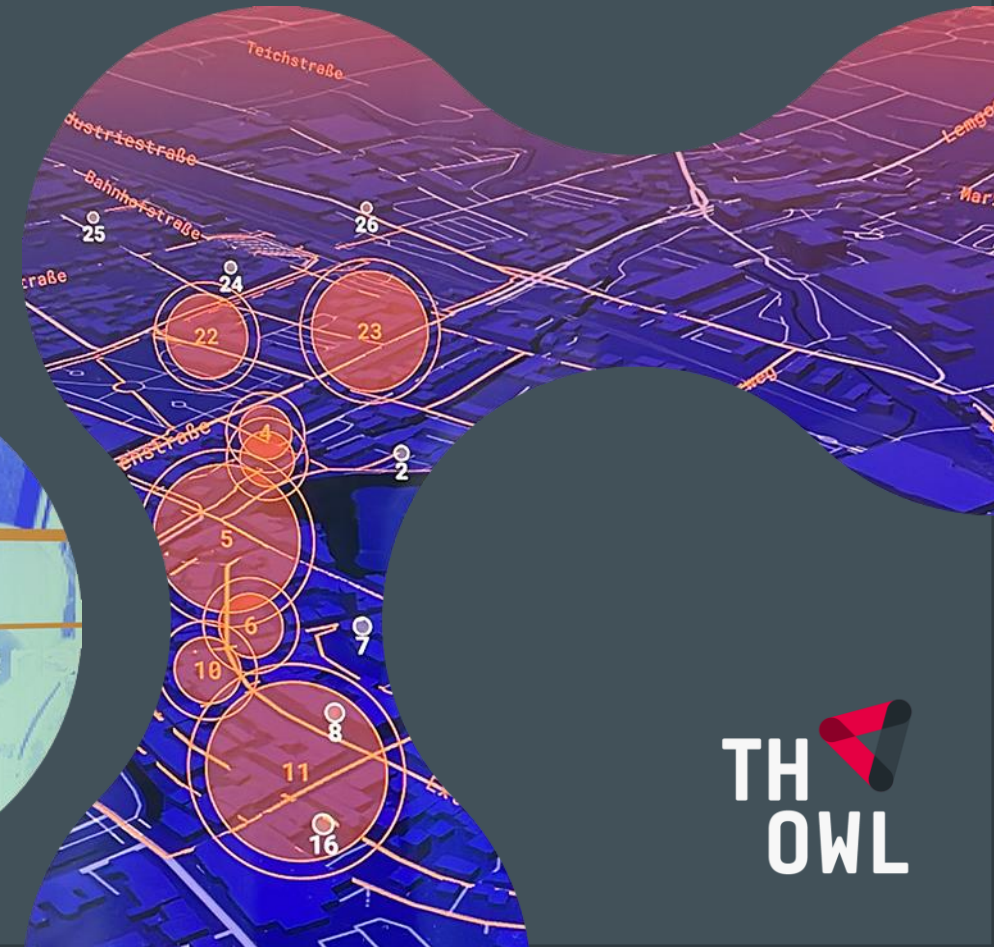
IDS INSTITUTE FOR
DESIGN STRATEGIES

The Use of Situated Visualized Data to Nudge Visitor's Paths:

A Case Study at the Detmold Design Week 2023

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REAL CORP 2024



TH
OWL

Agenda



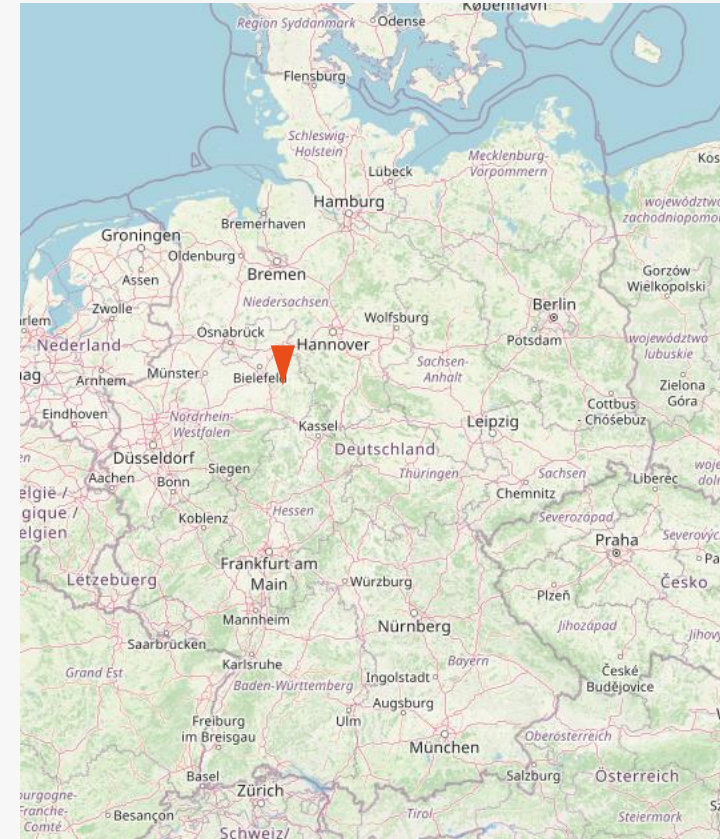
City of Detmold

Inhabitants: 73.000



Detmold.de

<https://www.detmold.de/startseite/zu-gast-in-detmold/tourismus/sehenswuerdigkeiten/historischer-altstadtkern/>



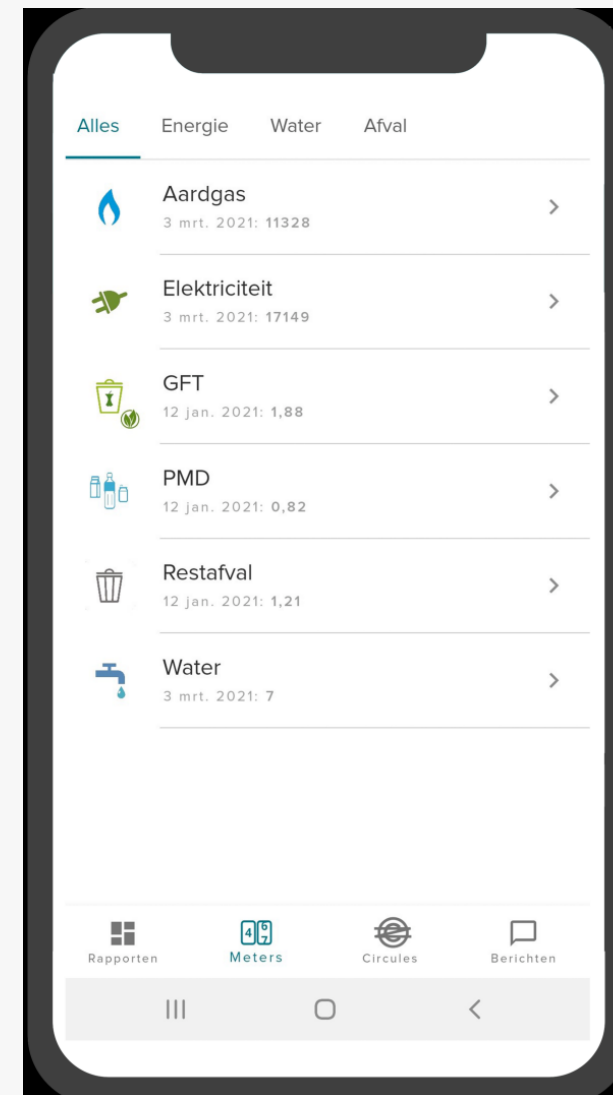
OpenStreetMap.org

Nudging

- Positive intervention that induces a voluntary change in behavior without resulting in external (negative) consequences (Thaler & Sunstein 2008)
- Example 1: position of healthy food in cafeteria
- Example 2: Antwerp Circular South



Engin Akyurt @Unsplash



Hofman & Van de Mosselaer 2021

https://magazine.antwerpen.be/circulair-zuid_en_2018-2021/together-we-want-to-live-smarter

Thaler, R.H. and Sunstein, C.R.: Nudge: improving decisions about health, wealth, and happiness. Yale University Press, New Haven, 2008.

Situated visualization

- “a visualization that is related to and displayed in its environment“ (White & Feiner 2009)
- Example 1: Nuage Vert in Helsinki
- Example 2: Data on Site



HeHe Association, H. Evans & H. Hansen

<http://www.hehe.org/projets/nuage-ver-no-1-helsinki>

White, S. and Feiner, S.: SiteLens: situated visualization techniques for urban site visits. 2009. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, ACM, Boston MA USA, 1117–1120. <https://doi.org/10.1145/1518701.1518871>.



Claes, S.; Coenen, J.; Vande Moere, A.: Conveying a civic issue through data via spatially distributed public visualization and polling displays. 2018. Proceedings of the 10th Nordic Conference on Human-Computer Interaction, ACM, Oslo Norway, 597–608. <https://doi.org/10.1145/3240167.3240206>

Case study setting

9/30 locations monitored

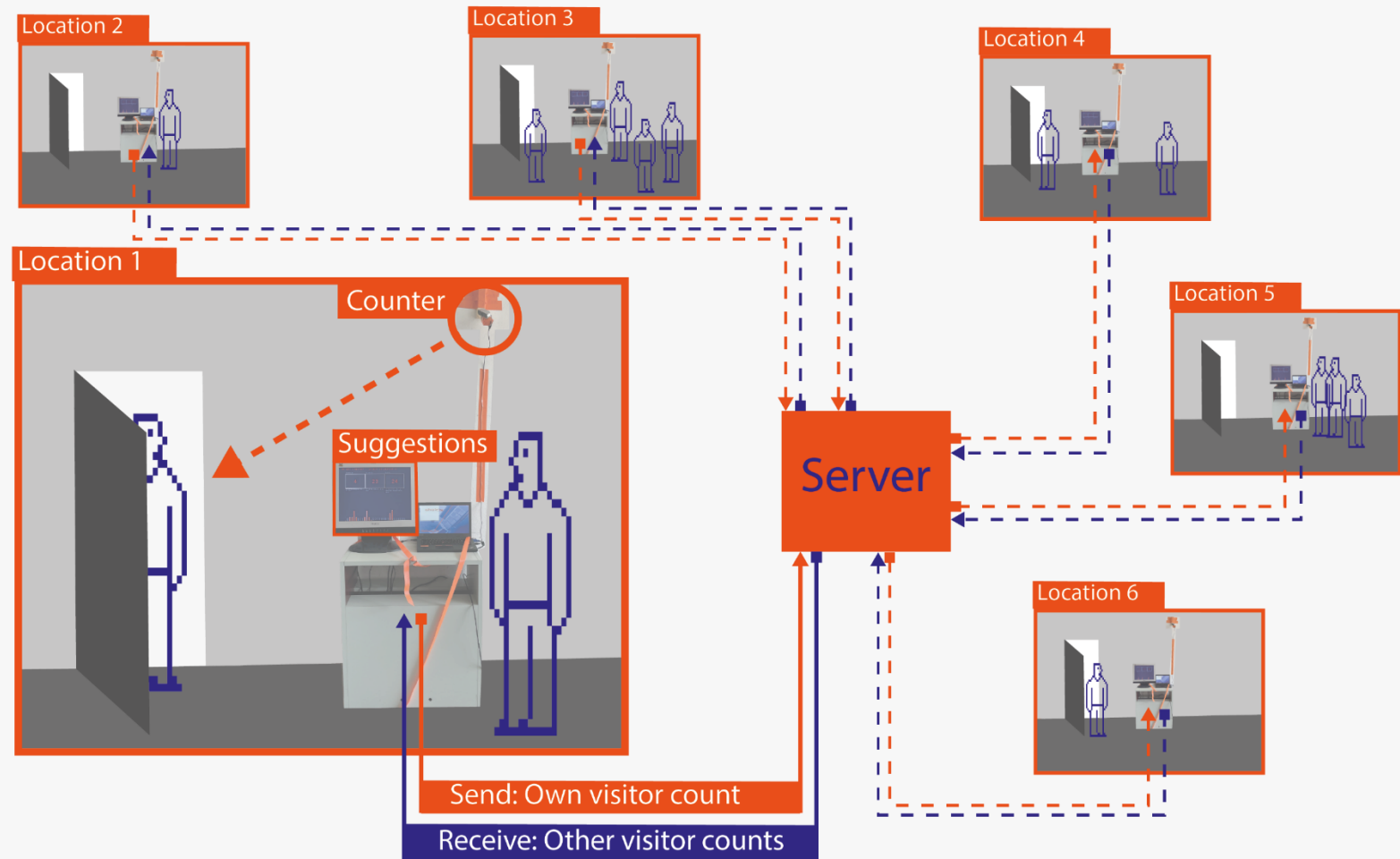
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**Detmolder Design
Woche 2023
08. Mai – 14. Mai**

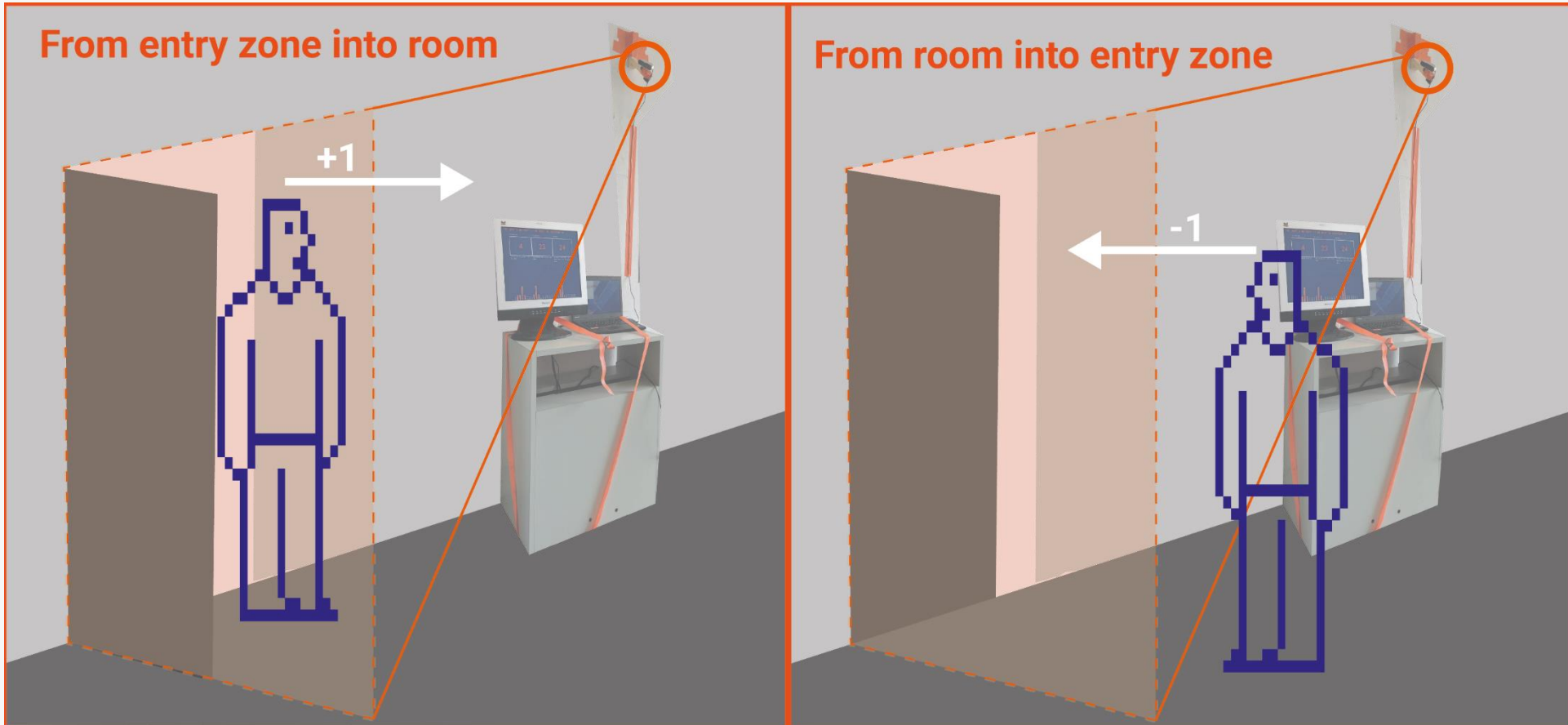
Detmolder Design Woche e.V.

<https://2023.detmolderdesignwoche.de/>



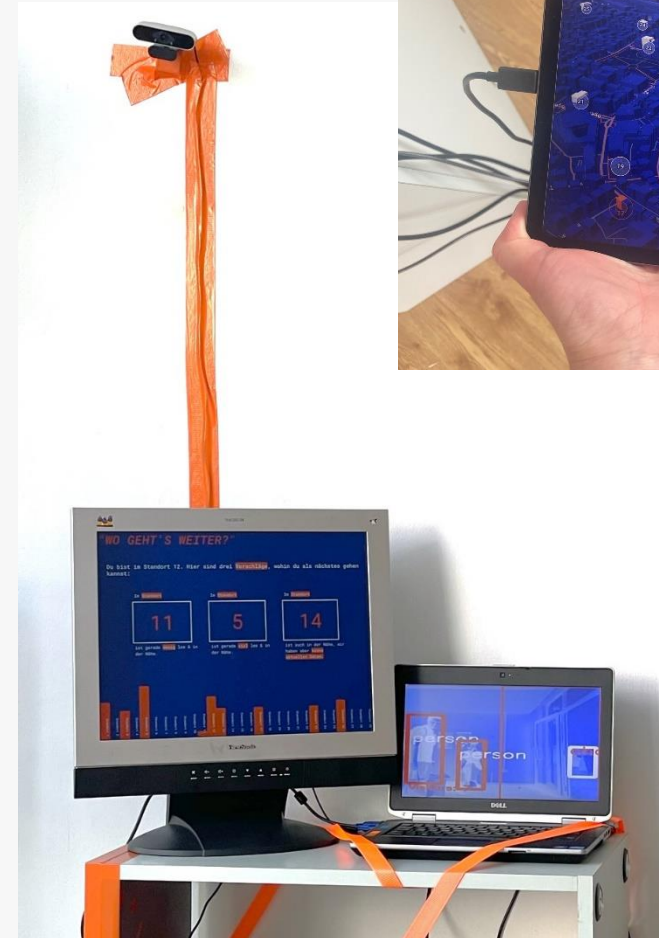
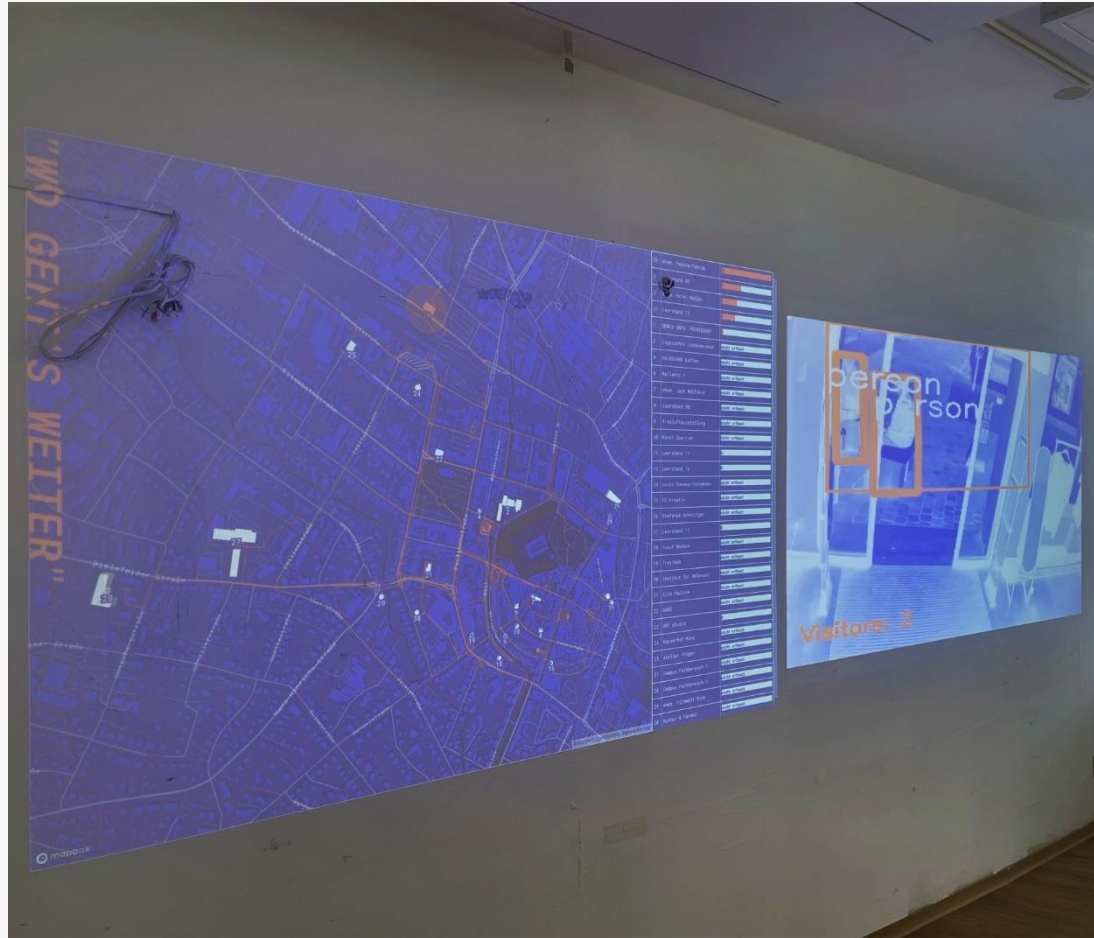
Data collection

Object detection and tracking with pre-trained model (OpenCV)



Data visualization

Visualization at info point, other locations and mobile



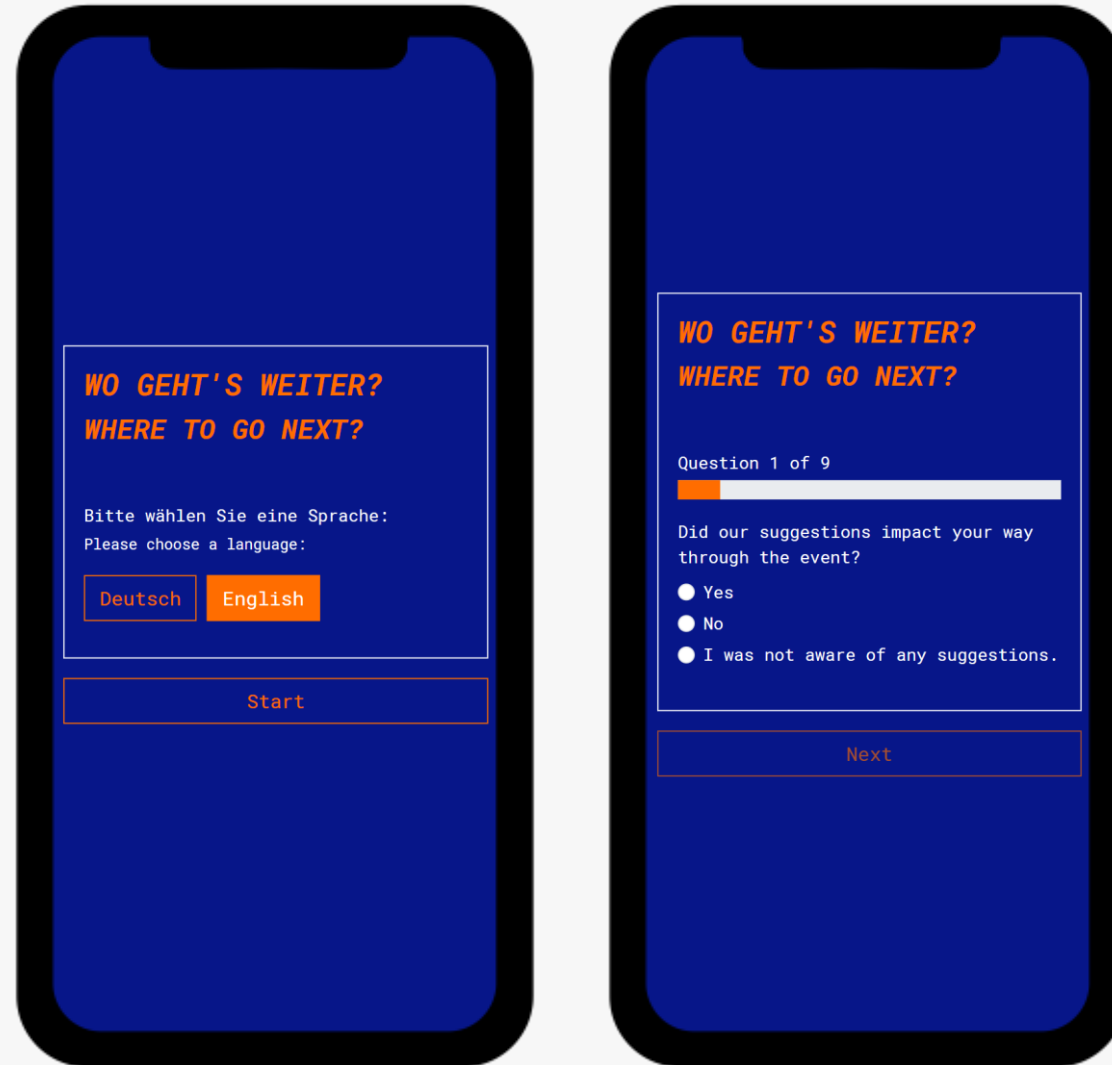
Survey

N=38

11 not aware of suggestions

10 impacted

9 not impacted



Discussion

Does transparent data collection and processes motivate participants?

Are people open to follow suggestions informed by situated data visualization?

How does the data have to be visualized and contextualized?

How can engagement be generated?

Outlook

