Mobile Public Display Systems

Abstract

In recent years many conventional public displays were replaced by electronic displays hence enabling novel forms of advertising and information dissemination. This includes mainly stationary displays, e.g. in billboards and street furniture, and currently first mobile displays on cars appear. Yet, current approaches are mostly static since they neither do consider mobility and the

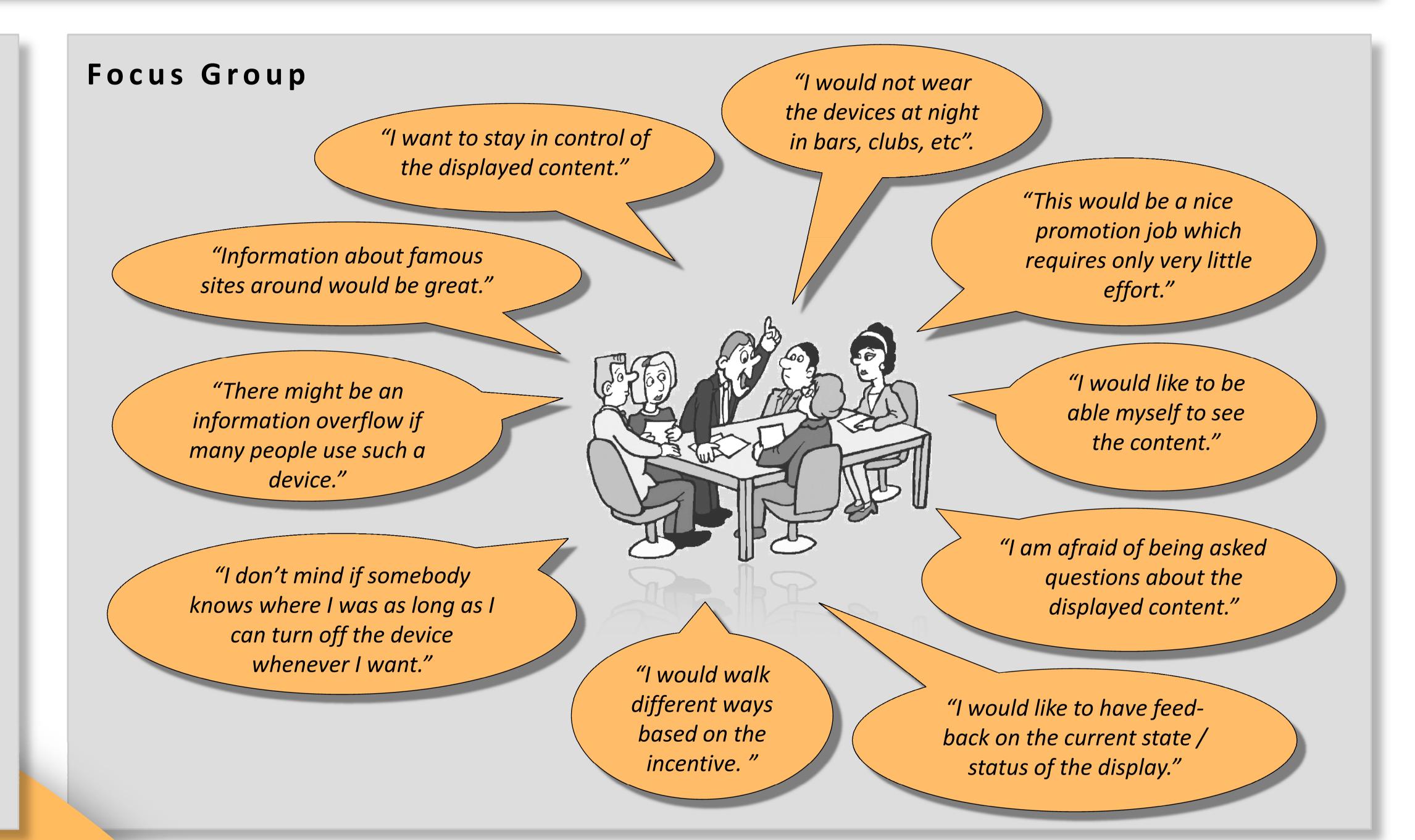
context they are used in nor the context of the viewer.

In our work we explore how mobile public displays, which rapidly change their own context, can gather and process information about their context. Data about location, time, weather, and people in the vicinity can be used to react accordingly by displaying related content such as information or advertisements.

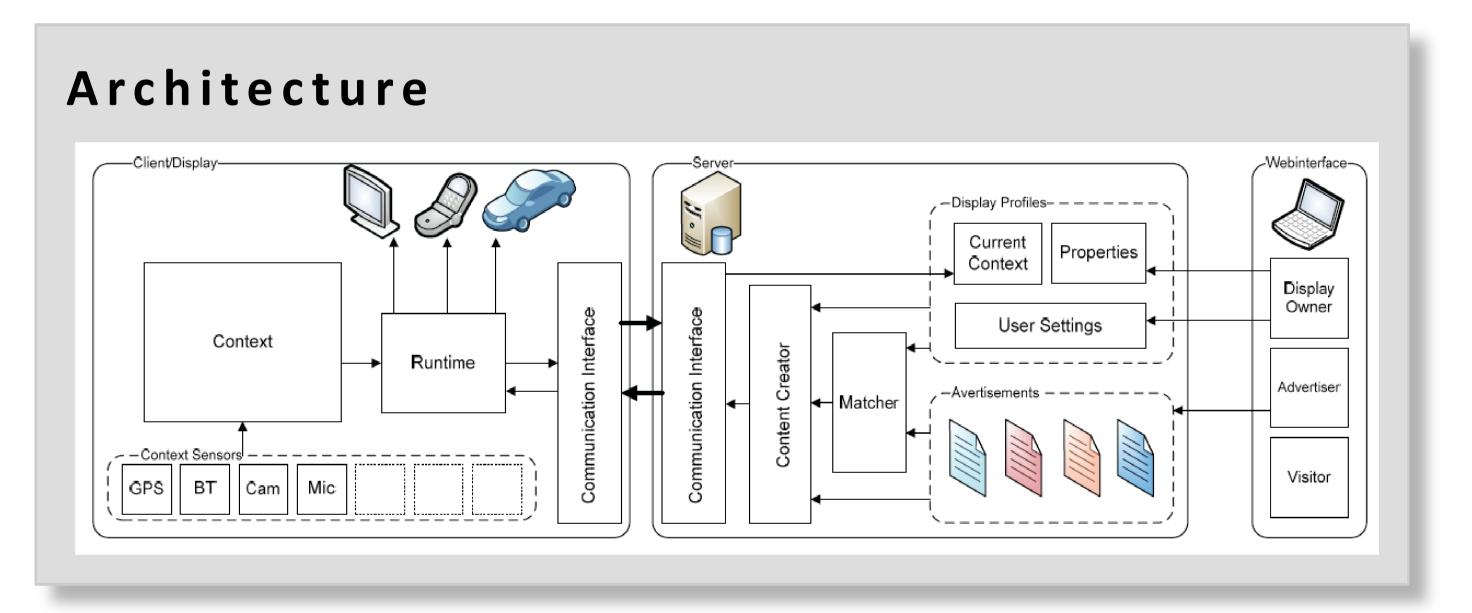
Approach

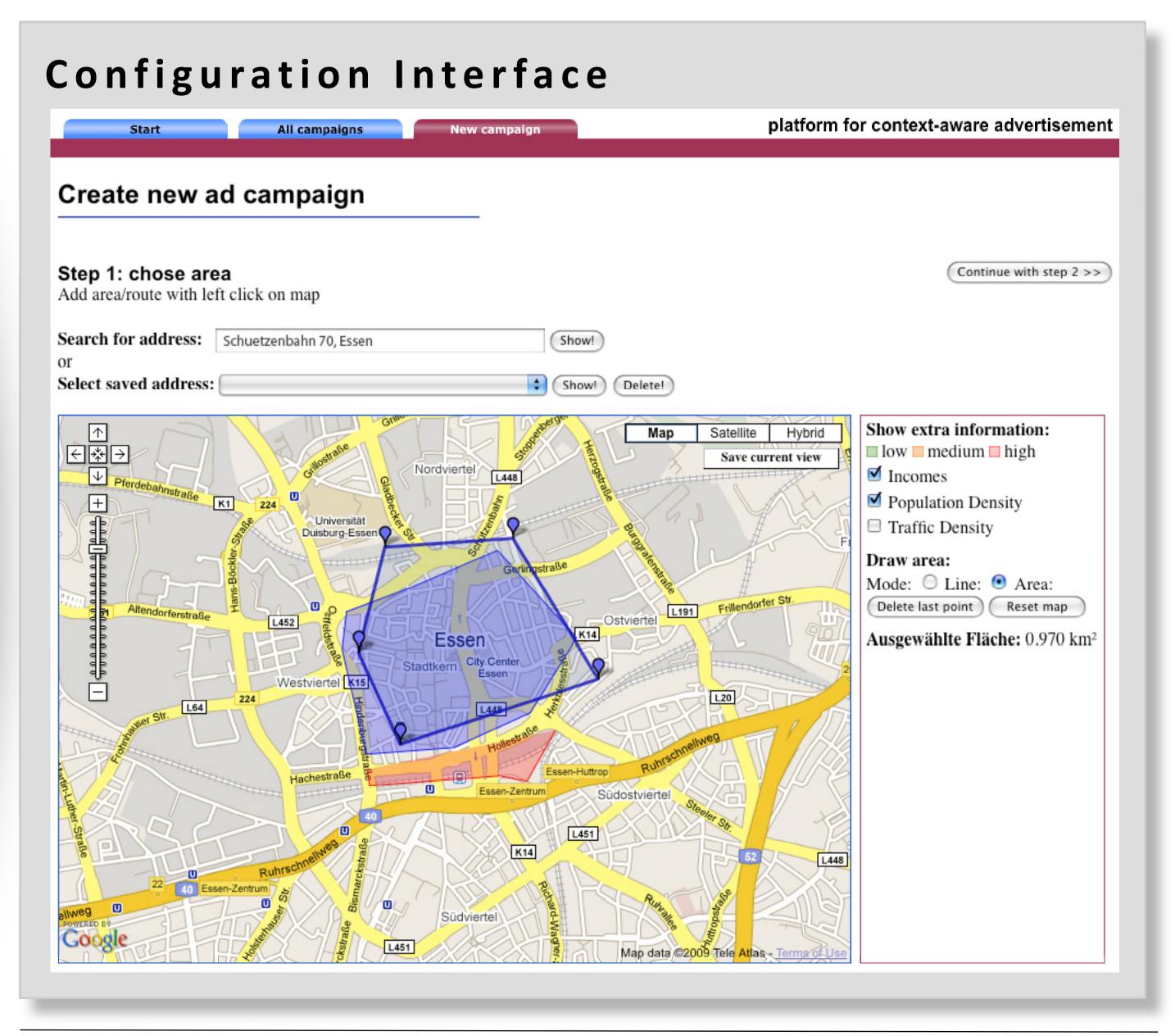
In order to explore the value and impact of context-aware mobile displays in public environments we deployed a system capable of selecting and displaying content based on context data derived from different sensors.

First, we integrated a tablet PC with a standard backpack. The tablet PC received information about its current position by using a Bluetooth GPS receiver. For displaying content on the screen we implemented a tool allowing for specifying campaigns in certain areas by using the Google Maps API. Once a person moves into one of the predefined areas, the tool automatically selects a previously created and uploaded image based on the current location.











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