

Presence Sensing Billboards

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Abstract: The Out-of-Home (OOH) media markets currently rely on a plethora of methods and technologies for measuring their potential or real success. From nationwide interviews over statistical analyses to device based mobility records, each of the OOH markets (in different regions or countries) has chosen its own mixture of measurement efforts in order to provide more or less clear numbers to their clients. In this contribution, we are presenting the *Presence Scanner*, a new and inexpensive technological approach to detecting the presence of people in front of OOH media sites. Based on an array of ultra sonic range finders and equipped with wireless communication capabilities, the Presence Scanner is on its way to resemble a flexible and scalable solution to plug and play activity sensing in (at least) indoor scenarios.

1 Towards Aware Billboards

Out-of-Home (OOH) and ambient media are still representing a substantial part of our daily advertising dosage, with about 10% and 8% of gross contacts, respectively, as of 2007. For instance, City-Light-Posters enjoy increasing popularity within the young and mobile audience. The attentiveness towards OOH media is lower than for most other media, except for radio, but is still rated around 2.8 (on a scale from 1 (low attentiveness) to 6 (high attentiveness) [DFIS08]).

However, the OOH market and especially its main shareholders—OOH advertising companies such as EPAMEDIA and JCDecaux—are facing rough times, as they are still struggling with the definition and measurement of *contacts*. Contacts however (or better: the *opportunity to see*, OTS [Kos09a]), are the currency of advertisement and in times of the Internet where views and clicks of advertisement banners are rather easy to count, the measurement methods used in classical advertisement markets such as TV, Radio and OOH have to be reconsidered. The OTS is closely related to the “frequency” of a specific OOH media site: how many OTS/passers-by are there in a certain amount of time (e.g. per hour)?

Pedestrians, cars and public transport users are all among the group of individuals to be considered in OOH media situations. While cars are usually tracked by official authorities and the usage of public transport is known by the public transport companies, pedestrians are harder to grasp (in numbers), as they roam around rather freely. Statistical analyses from data gained in interviews or questionnaires can serve as a powerful and accurate source for media planning, however “real” data, measured at the place of occurrence has a clear potential for higher accuracy and it can even serve for realtime decisions if required.