Measuring (Ambient) Persuasive Technologies

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ABSTRACT
In this paper we describe a half day workshop about the measuring of (Ambient) Persuasive Technologies at Measuring Behavior Conference 2010. The workshop aims to bring together some of the leading experts in the field in order to foster an interdisciplinary dialog regarding challenges and possibilities of this novel research area.

Author Keywords
Ambient Intelligence, Ambient Persuasion, persuasion, persuasive technologies, measurement, evaluation.

ACM Classification Keywords
H.5.m Information interfaces and presentation: Miscellaneous, H.1.2 User/Machine Systems: Human factors

INTRODUCTION
Recent research has started investigating Persuasive Technology, which can be defined as technologies that are "intentionally designed to change a person's attitude or behavior or both" [2]; see also [1]. For example, persuasive picture frames can be used to improve sitting posture [5], dashboard instruments can give car drivers feedback about their fuel consumption, and robots that take on the role of social actors and praise or criticize users depending on their performance (e.g., [3]).

The current workshop will assess the measurement of

Persuasive Technologies. That is, crucial in the effective development and employment of these technologies is the measurement of persuasive effect in general, long term effects in particular, underlying mechanisms and processes and appropriate methods to measure such effects. Measuring Persuasive Technology inherently demands a multidisciplinary approach: Amongst these are perspectives related to human-computer interaction, psychology, sociology, and ethics/ morality.

Next to stimulating conscious behavior changes, (ambient) persuasive technology [8] can also influence behavior in unconscious ways [4]. The current workshop will not only spend attention to variables related to conscious behavior change (e.g., explicit attitude change), but also to unconscious determinants and effects (e.g., implicit attitude change).

The workshop builds on previous efforts by the authors, such as a workshop at CHI 2008 [6], which aimed to establish and further develop the concept of Ambient Persuasion and more recently a workshop at AmI-09 [7], which focused on applications in this novel area and the potential ethical dilemmas.

CHALLENGES
- *Measuring the persuasive effect of persuasive technology* on different levels, e.g. attitude change, awareness, behavioral change. This challenge raises the question which kind of factors and outcomes are suitable to determine the success of a persuasive intervention and how these factors can be evaluated.

- *Methods for measuring long term persuasive effects* (e.g. the Experience Sampling Methodology –ESM).

- *Assessing the persuasive potential of early prototypes* is motivated by the need to identify promising persuasive

Proceedings of Measuring Behavior 2010 (Eindhoven, The Netherlands, August 24-27, 2010)
Eds. A.J. Spink, F. Grieco, O.E. Krips, L.W.S. Loijens, L.P.J.J. Noldus, and P.H. Zimmerman

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