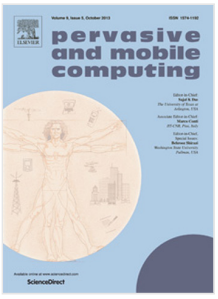
Accepted Manuscript



Survey-based exploration of attitudes to participatory sensing tasks in location-based gaming communities

Delphine Christin, Christian Heinig

PII: S1574-1192(16)00003-1
DOI: http://dx.doi.org/10.1016/j.pmcj.2016.01.001
Reference: PMCJ 670

To appear in: *Pervasive and Mobile Computing*

Received date: 27 June 2014
Revised date: 3 April 2015
Accepted date: 7 January 2016

Please cite this article as: D. Christin, C. Heinig, Survey-based exploration of attitudes to participatory sensing tasks in location-based gaming communities, *Pervasive and Mobile Computing* (2016), http://dx.doi.org/10.1016/j.pmcj.2016.01.001

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

*Manuscript
Click here to view linked References
ACCEPTED MANUSCRIPT

Survey-based Exploration of Attitudes to Participatory Sensing Tasks in Location-based Gaming Communities

Delphine Christin[1a,b], Christian Heinig[c]

[a] *Privacy and Security in Ubiquitous Computing, University of Bonn, Bonn, Germany*
[b] *Fraunhofer FKIE, Wachtberg, Germany*
[c] *Secure Mobile Networking Lab, Technische Universität Darmstadt, Darmstadt, Germany*

Abstract

An increasing number of participatory sensing applications have been developed in recent years. However, most of them are still in the early adoption phase and count only few users as compared to the billions of devices that could be leveraged. On the other side, existing location-based games, such as geocaching or Ingress, gain in popularity and attract up to millions of users worldwide. Since the players of location-based games are already exploring their environment, one approach could be to especially address these communities in order to increase the user base of participatory sensing applications. To this end, we conduct a preliminary questionnaire-based study involving 337 participants to investigate the possible attitudes of such players towards participatory sensing applications. In particular, we analyze the potential interests of our participants in sensing tasks based on their demographics, played games, and sensing modalities. Our results show that our participants would prefer contributing to sensing tasks when integrated in geocaching. Moreover, a point-based reward system would not significantly motivate them and could even have negative consequences.

Keywords:
Participatory sensing, mobile sensing systems, incentives

[1]Friedrich-Ebert-Allee 144, 53113 Bonn, Germany, Phone: +49 228-73-60551, Fax: +49 228 73-54254, E-Mail: christin@cs.uni-bonn.de

Download English Version:

https://daneshyari.com/en/article/6888738

Download Persian Version:

https://daneshyari.com/article/6888738

Daneshyari.com