

T-110.5190 Seminar on  
Internetworking  
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# Topics

- Investigating Users of Mobile Communities
- Trust Formation in Mobile Communities
- Content Delivery in Multi-Channel Products from User's Point-of-View

# Investigating Users of Mobile Communities

- From a user research point-of-view, Mobile Communities present us with novel demands:
- How to study users on the move? Should researchers participate in users' lives as passive observers or participate in their activities to fully investigate the emerging usage patterns and to really understand the meaningfulness of their actions as well as their needs?
- Or is it enough or even better to test in an unintruding way, without bothering the users? Can you test mobile applications in the lab environment, or should you always go to the field?
- What kind of traditional methods of usability and user research seem best suited for studying mobile users? Are the old methods enough, or should new ones be invented? Can users' self-reports be trusted?
- The student should study existing articles on the subject: How have mobile users been studied so far, and with which methods? What do the results look like? Please try to find the community angle in what material and how you collect.

# Some references

- *Digital Ethnography: The Next Wave in Understanding the Consumer Experience*  
Masten and Plowman (Cheskin), DMI Journal, Spring 2003
- *Usability Testing of Mobile Applications: A Comparison between Laboratory and Field Testing*  
Anne Kaikkonen, Aki Kekäläinen, Mihael Cankar, Titti Kallio, and Anu Kankainen  
Journal of Usability Studies, Issue 1, Volume 1, November 2005, pp. 4-17
- *New Techniques for Usability Evaluation of Mobile Systems.*  
Kjeldskov J. and Stage J., International Journal of Human-Computer Studies (IJHCS) 60(2004):599-620

# Trust Formation in Mobile Communities

- How do users in Mobile Communities decide whom they trust? How do they reason about their trust decisions, and how does this trust become evident?
- In other words, what kind of criteria need to be met in order for users to be ready to share private information and experiences with other users via mobile communication devices?
- Are there different trust levels for different types of information or type of interaction, as well as for different types of contacts? (think of how e.g. Skype, MSN Messenger, eBay have organized their user settings and preferences).
- Think of the specific criteria that **mobility** sets for trusting: combine the info about trusting principles with mobile usage situations and don't forget that this is about **community**

# Some references

- **Food for thought:**  
*Towards Trust-based Knowledge Management for Mobile Communities*  
AAAI Spring Symposium on Agent-mediated Knowledge Management  
March 24-26, 2003, Stanford University  
<http://www.dfki.uni-kl.de/~elst/AMKM/slides/SS103SSchulz.ppt>
- **About trust formation in general:**  
*Araujo, I., Araujo, I (2003): Developing Trust in Internet Commerce*, Proceedings of the 2003 conference of the Center for Advanced Studies conference on Collaborative Research, October 2003
- **About trust formation principles in authentication in general:**  
*Basu, A and Muylle, S (2003): Authentication in E-Commerce*, Communications of the ACM, December 2003/Vol. 46, No. 12 ve, pp. 159-166
- **Users and mobile services:**  
*User acceptance of mobile services – value, ease of use, trust and ease of adoption*  
Eija Kaasinen  
Doctoral Dissertation TUT, 2005 VTT Publications 566  
<http://virtual.vtt.fi/inf/pdf/publications/2005/P566.pdf>
- **More philosophical:**  
*Trust and Epistemic Communities in Biodiversity Data Sharing*  
Nancy A. Van House  
JCDL'02, July 13-17, 2002, Portland, Oregon, USA

# ...and some more...

- **Some examples of more technical stuff, but also involving user investigations:**

*Trust and the Establishment of Ad-hoc Communities*

Sye Loong Keoh, Emil Lupu  
Imperial College London, UK

<http://www-dse.doc.ic.ac.uk/Events/itrust/papers/Keoh.pdf>

*Trust in Recommender Systems*

John O'Donovan & Barry Smyth

IUI'05, January 9–12, 2005, San Diego, California, USA.

*The Formation of Trust and Distrust in Recommendation Agents in Repeated Interactions: A Process-Tracing Analysis*

Sherrie Xiao Izak Benbasat, ICEC 2003. Pittsburgh, PA

*Trust for Ubiquitous, Transparent Collaboration*

Brian Shand, Nathan Dimmock\* and Jean Bacon, Wireless Networks 10, 711–721, 2004 Kluwer Academic Publishers. Manufactured in The Netherlands

# Content Delivery in Multi-Channel Products from User's Point-of-View

- More and more services today can be accessed via multiple means. Users can check their work schedules and emails on the run, or chat and exchange photos and pictures with their pals - be part of their community - wherever they are.
- when content is delivered to users regardless of device they are currently using, this presents the question how to present the same information in the different devices with very different UIs and usability criteria in a way that is most usable.
- For example, should the services look as much as possible the same on a PDA as on PC or mobile phone, or would it be a better solution to present the information differently in each device, according to the customs and standards of the current device in use? Will users find the service “the same” or will “look & feel” of it be gone?
- Should all the functionalities be always available from each device and from everywhere, and are there some privacy issues involved here as well? Or should there be restrictions on the content that is available, depending e.g. on location or device used?
- How would these restrictions affect the users' perception and commitment to this kind of restrictions?
- ..or other issues you may come across.



# Some references

*Enhancing Multi-Channel Mobile Internet User Experience.*  
Xiaochuan MA, Hui SU, Changyan CHI, Shiwan ZHAO  
In Poster Proceedings of the Eleventh International World Wide Web  
Conference (WWW 2002) <http://www2002.org/CDROM/poster/84/>

*MovieAgent: Challenges in Design and Implementation of Multi-UI  
Services*, Titti Kallio, in Hft Proceedings 2001

*Multi-Channel Solutions: Content, Technology, Concepts and  
Usage*, Korpiaho, M. (ed.): Addison Wesley, 2004

**Also the VHO project at CS lab may be of interest:**

<http://www2.cs.hut.fi/~pmrg/index.cgi?id=14>