

Tutorial: Designing and Evaluating the Sociability of Interactive Television and Online Video

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ABSTRACT

In this tutorial, we will discuss how the social uses of television have an impact on how we should design and evaluate interactive television and online video applications. We will focus on the concept of sociability, and explain how this can be evaluated using guidelines and heuristics. We will also discuss how sociability can be studied by performing user tests, and which aspects of testing are different from studying usability. Although the guidelines and user tests are especially appropriate for designing and evaluating social television systems and online social video, parts of it are also suitable for other iTV or online video applications.

Categories and Subject Descriptors

H.4.3 Information Systems Applications: Communications Applications, H.5.2 User Interfaces: Evaluation/methodology, H.5.1 Multimedia Information Systems: interactive television

General Terms

Measurement, Design, Experimentation

Keywords

Sociability, heuristics, evaluation, social television

1. INTRODUCTION

In past EuroITV conferences, as well as at uxTV2008, social TV has proven to be an important and exciting new topic of research in interactive television. In the past year, social TV is starting to make the move from academic and industrial research labs [e.g. 1, 3, 6, 7] to the consumer market. The introduction of widgets on connected television sets (e.g. by Yahoo! and Opera) opens up a

whole range of possible social TV applications, and the first social video applications on the web are taking form (e.g. Watchitoo or Clipsync). As is good practice in user-centered design, evaluating these systems early and often is important to create an optimal user experience. Although several guidelines for evaluating the usability of interactive TV exist [2, 9], and heuristic evaluation as well as usability testing is a well-known and often practiced technique, for applications being used in a social context such as the social television systems and online social video applications mentioned above, evaluating only usability is not enough. Even if these applications are evaluated to improve their usability, it doesn't mean that the social interactions they are supposed to enable are well supported.

This tutorial wants to fill this gap by teaching researchers and practitioners how to design and evaluate social features of interactive television and online video. Based on his extensive experience in performing user tests of social television systems for evaluating their sociability (e.g. [4]), the presenter will explain the practical issues related to performing user tests with iTV focused on social interactions. Furthermore, he will discuss the sociability heuristics he has created based on these tests [5], as well as several other social interface guidelines, and explain how they can be used to evaluate social television systems and online social video applications, or social aspects of interactive television and online video in general.

The proposed structure of the tutorial is as follows: first, the social uses of television as documented by several media researchers [8, 10] will be shortly introduced. They will be linked with the current state of interactive television services and online video applications, including a wide range of social TV systems and social video applications on the web, and the need for designing and evaluating sociability will be explained. After this, an overview of sociability evaluation methods focused on social interaction will be discussed, including small exercises. Then, an overview of twelve sociability heuristics the presenter has developed will be given, along with an explanation of how to use them to evaluate iTV and online video. Finally, a

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practical hands-on session will be held in which the participants can apply the sociability heuristics to an online social video application such as Watchitoo (or – due to the fast changing nature of the area – another suitable application that will be available at the time).

2. SCHEDULE

- 1/2 hour introduction to the social uses of (interactive) television and online video
- 1 hour discussing sociability evaluation methods
- 1/2 hour overview of sociability heuristics
- 1 hour practical exercise

3. TARGET AUDIENCE

The target audience for this course are researchers and practitioners that design or evaluate interactive television or online video applications, and that want to focus on social aspects of iTV and online video. The tutorial requires no specific background knowledge, as most concepts related to the content of the tutorial will be explained in detail.

4. LEVEL OF THE TUTORIAL

The level of the tutorial is beginner.

5. TUTORIAL HISTORY

This tutorial was first organized as a workshop for interaction designers and usability professionals as part of the EU CITIZEN MEDIA project at the K.U.Leuven (22/1/2009). Based on the positive responses from participants, the instructor was invited to teach the course for the Eindhoven Birds of a Feather (BOF) group of CHI Nederland at the Technical University of Eindhoven (26/3/2009). The course was also taught at EuroITV2009 (3/6/2009). For EuroITV2010, the course will be modified from the previous edition at EuroITV2009 by broadening the focus to all video based applications, and including a broader range of evaluation methods. Given the fast changes in this area, care will be taken to include the most recent examples of social iTV and online video applications, especially the application used for the interactive exercise. Finally, minor revisions will be made based on previous participants' comments.

6. PRESENTER'S BIO

David Geerts has a master in Communication Science at the K.U.Leuven and a master in Culture and Communication at the K.U.Brussel. He was project leader of the Mediacentrum of the Katholieke Universiteit Leuven (Belgium) for several years, and now leads the Centre for User Experience Research (CUO). He is involved in several research projects on user-centered design and evaluation. Furthermore, he acts as content manager for the

post academic course Human-Centered Design. David has over ten years of experience in teaching for a diverse audience: e.g. introductions to new technologies for secondary school children, practical seminars in web design for university students and in-depth courses on usability topics for practitioners. Currently he teaches a master course in Human-Computer Interaction for students in communication science, economy and industrial engineering, as well as usability design courses and workshops for practitioners. David Geerts has organized workshops and SIGs at CHI2006, CHI2007, CHI2008, EuroITV2007 and EuroITV2008. He finished his doctor's degree on Sociability of Interactive Television, for which he has developed twelve heuristics for designing and evaluating social television interfaces. David Geerts is co-founder and chair of the Belgian SIGCHI.be chapter, and was program chair of EuroITV2009, the 7th European Interactive TV Conference.

7. REFERENCES

- [1] Boertjes, E., Schultz, S. and Klok, J. Pilot ConnecTV. Gebruikersonderzoek. Public report of the Freeband Project, TNO (2008)
- [2] Chorianopoulos, K. User Interface Design Principles for Interactive Television Applications. In *International Journal of Human-Computer Interaction*, 24, 6, Taylor Francis (2008)
- [3] Coppens, T., Trappeniers, L. & Godon, M. AmigoTV: towards a social TV experience. In Masthoff, J. Griffiths, R. & Pemberton, L. (Eds.) *Proc. EuroITV2003*, University of Brighton, (2004)
- [4] Geerts, D. 2006. Comparing voice chat and text chat in a communication tool for interactive television. In *Proc. NordiCHI 2006*, 461–464.
- [5] Geerts, D., & Grooff, D. D. (2009). Supporting the social uses of television: sociability heuristics for social tv. In *Proceedings of the 27th international conference on Human factors in computing systems* (pp. 595-604). Boston, MA
- [6] Harboe, G., Massey, N., Metcalf, C., Wheatley, D., & Romano, G. The uses of social television. In *ACM Computers in Entertainment (CIE)*, 6, 1 (2008)
- [7] Harrison, C., Amento, B., 2007. CollaboraTV: Using asynchronous communication to make TV social again, In *Adjunct Proceedings of EuroITV2007*, 218-222.
- [8] Lee, B. & Lee, R.S. How and why people watch tv: implications for the future of interactive television. In: *Journal of advertising research*, 35, 6 (1995), 9-18
- [9] Lu, Karyn Y. *Interaction Design Principles for Interactive Television*. Master's Thesis, Georgia Institute of Technology (2005)
- [10] Lull, J. The social uses of television. In: *Human Communication Research*, 6,:3, Spring. (1980) 197-209