

Using Overlays and Second Screen to Stimulate Social Interaction Without Compromising Passive Consumption

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ABSTRACT

Creating a good interactive TV experience that does not compromise the ‘regular’ TV experience is no simple task. We propose a combination of second and first screen to offer a social-interaction stimulating, interactive experience that is completely optional. First observations and interviews have been completed. The next steps are a series of prototypes and a field pilot test in the Netherlands.

Author Keywords

Interactive TV; Second Screen; User Experience; Social Interaction

ACM Classification Keywords

H5.1 [Information Interfaces and presentation]: Multimedia information systems – audio, video; H5.m [Information Interfaces and presentation (e.g., HCI)]: Miscellaneous

INTRODUCTION

Interactive forms of TV have been explored for a long time. In the beginning the main focus was on interaction on and through the main television screen [5], this has shifted to interaction on and through second screen devices [1].

With the rise in popularity of smartphones and tablets the amount of commercial second screen applications has also increased rapidly. However according to app builders and broadcasters we interviewed, the percentage of TV viewers that actually use these apps is still quite low [4]. Therefore it is important to them that these second screen applications do not compromise the ‘regular’ TV experience.

Interweaving the active and the passive

TV is traditionally a lean back medium and many people use it this way to relax. Care should be given when adding interactivity to not estrange these passive viewers. The way forward lies in a method to deliver a rich interactive experience to the part of the audience who wants it, that does not compromise the passive viewing experience.

Social Interaction During TV Viewing

Social interaction can enhance the TV experience when applied to the right TV genres [3][6]. There are two forms of social interaction for TV collocated and remote. There has been quite a substantial amount of work done for

remote social interaction [2][3]. But less that has focused on the collocated interactive experience. Obviously viewers in the same room can already communicate with each other but it would be interesting to see how second screen devices can be used to stimulate social interaction in the living room.

LESSONS LEARNED FROM OBSERVATION AND INTERVIEWS

We previously investigated a commercial second screen companion application that offered extra information in accompaniment to a television program. Based on observations and interviews with viewers and producers, and actual usage data of a companion app from Google Analytics, we discovered several insights and recommendations on how to design companion apps related to ease of use, timing, social interaction, attention and added value [4].

One of the things we learned is that viewers enjoy the added layer of interactivity to their ‘passive TV show’, however the ‘interactive’ viewer is usually still just a very small part of the total audience. Broadcasters and Program makers are therefore hesitant to implement interactivity that could ‘bother’ these ‘regular’ viewers. As one broadcaster put it:

“The problem is that many program makers say the group of second screen users is only a small percentage of our viewers and won’t change their show just for them.”

One way to offer an interactive experience, that viewers who do not want to participate will not notice, is through the use of a second screen. A second screen application can offer extras without interfering with the first screen. Because second screen devices are usually personal devices, like tablets and smartphones, even when there are several people watching a TV program in the same room, one or more of them can participate in the interaction without disturbing the others who do not wish to participate. The market penetration for second screen devices is also high. Therefore availability should not be a concern.

Another concern from TV producers is that a second screen companion app will distract its users from the television show itself.

“A challenge is to convince program makers that the second screen won’t distract from the first screen experience.” – Second screen app developer

From the observation and interviews we found that viewers that use these second screen apps use non program related second screen applications like email, Facebook or Twitter when there is no dedicated second screen application available for the show itself.

“If there’s nothing happening for a while I tend to switch to something else. You might miss some updates then, because you don’t switch back to the app in time.”

Dedicated second screen applications could therefore actually increase the attention of these users for the TV program. As a second screen app developer puts it:

“If you offer a good second screen app with a TV show and you can engage viewers through this second screen, you will end up with a more attentive TV viewer.”

In conclusion using a second screen to deliver an interactive experience for a TV show has the advantages of having a readily available infrastructure and the possibility to not disturb people who just want to passively enjoy the show. There is however also a big disadvantage of relying solely on the second screen for interactivity.

MOVING ON WITH FIRST AND SECOND SCREEN

The downside of the use of a second screen for interactivity is the loss of a group feel when watching a show together in the same room. Everybody uses an individual device. It is possible for people to share a device but this brings with it its own problems with polls or quizzes because only one answer can be given. The TV screen is the central device in this scenario. The difficulty is using the TV to facilitate a group experience without compromising the experience of those who do not want to participate in the interactive portion of the TV show. A way to solve this is by using overlays on the TV. Overlays are a way to show information to a TV viewer that is not imbedded in the broadcast signal. Overlays are used to show TV viewers the EPG or TV menus for instance. With the use of overlays in combination with second screen devices, it is possible to offer a group experience that doesn’t interfere with the show itself while still giving everyone control through their own device.

To find out how a setup like this impacts group dynamics, we are planning a pilot with an interactive quiz application as an addition to the Dutch TV show ‘De Rijdende Rechter. This pilot will be executed as part of the TV-Ring European research project. “De Rijdende Rechter is a Dutch TV show that deals with a judge ruling in disputes between civilians. There is a quiz element to this show in which viewers can predict how the judge will rule on certain statements. At the moment anyone with a second screen device can participate but there is no way to see scores or a status from other participants. In the pilot an overview of the participants and

their scores will be presented on the TV through an HbbTV overlay. We predict that this will lead to more social interaction between the people who watch and participate in the quiz together and thereby to more enjoyment. In the first prototyping phase we will create different versions of the quiz. This will be a round of paper prototypes. The goal of this phase is to try many different methods for different phases of the game, like the setup, the questions, and the scores, to investigate which combination stimulates social interaction the most. The methods will differ in the amount of information (names, scores, rank, answer status etc.) that is presented and on which screen this information is displayed (TV, second screen). After the initial phase the most promising methods will be turned into interactive prototypes. The end goal is to have a live version that will be fully functional which will be developed in collaboration with our TV-Ring partners from the NPO (Nederlandse publieke omroep, www.npo.nl) and Peoples Playground (www.peoplesplayground.nl).

DISCUSSION

Interactive TV applications are very much enjoyed by a certain group of users. However this group is still relatively small compared to the whole of the TV audience. Because of this Broadcasters and TV makers are hesitant to invest much in interactive TV development and they certainly do not want to adapt their regular programs too much and risk alienating this majority of passive viewers. This leads to a chicken and egg conundrum: because TV makers are hesitant to offer interactive content, the state of interactive TV is not developing very rapidly which in turn leads to the group of interactive viewers staying small which leads to little investment in interactive TV etc.

We already found second screen applications to be a good way to offer an interactive TV experience that does not interfere with regular viewing. However the second screen alone does not maximize the increased social interaction interactive TV can offer. We propose a setup with second screen and overlays on the first as a solution. This setup is able to deliver a rich interactive experience that stimulates interaction to the viewers who seek it out while at the same time being almost invisible to the viewers who want to ‘simply watch their show’. We believe it can play a big role in solving the interactive TV chicken and egg conundrum.

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