Two Screen Now: A First and Second Screen Game App

Joost Negenman  
NPO R&D  
Hilversum, Netherlands Country  
Joost.negenman@npo.nl

Susanne Heijstraten  
NPO R&D  
Hilversum, Netherlands Country  
Susanne.heijstraten@npo.nl

Marc Veuger  
Angry Bytes, two screen  
Hilversum, Netherlands  
marc@angrybytes.com

ABSTRACT
We will demonstrate a second screen platform, two screen now, that makes it possible to play along with a second screen application that interacts and aggregates scores on the HbbTV content layer on a central TV screen. Creating an engaged social in house experience.

Author Keywords
Second screen: HbbTV; social interaction; simultaneity; togetherness; competition; 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
Nowadays many TV shows have a second screen application that makes it possible to play along. This is in many cases an individual experience with sometimes a social media extension. We created a platform and application that makes it more engaging to play together and that stimulates social interaction in the living room, by playing each other.

How does it work?
Questions from TV-shows, like a poll, a prediction or knowledge can be answered simultaneously, by users in the living room on their personal second screen. The second screen app players see their individual results presented on the first screen, the central TV.

Each player activates the second screen app and creates its own digital self (like a picture or avatar) or gets one assigned.

On the second screen app or from the TV-show the question appears that must be answered. On TV's HbbTV layer the answer of each player is displayed, including the use of signal colors like; green (good answer) and red (wrong answer).

The order or ranking changes after each question. This encourages the competition and social interaction in the living room.

Also it’s possible to display the aggregated outcomes, of all other second screen players of the show in whatever cut out possible, like region or country.

User experience
To optimize this first screen experience and the second screen application, KU Leuven did research on user experience of second screen applications and second screen in combination with the first screen. The found learning’s are applied in the second screen applications we developed. Important learnings distracted from the research on second and combined first screen UX:
- Let elements of the show directly influence the rules of a second screen game
- Have the game increase identification of viewers with people from the show
- To lessen distraction confine the games decisive moments to brief periods
- Have something at stake, at the very least have points and a winner
- Focus on competition between people who know each other.

**Technical platform**
The Angry Bytes' implementation for HbbTV is an extension on their existing real time platform that is primarily used for massive real time interaction on companion screens.

The companion screen runs in all browsers on most desktops, tablets and mobiles in the internet browser. It uses different connection types like websockets to connect to the real time platform.

The HbbTV extension shows all quiz data gathered from the same local network/wifi. Participants in the living room that selected the Multiplayer option can see what their peers are doing on television.

**CONCLUSION**
We created added value in watching TV with second screen play-along in a household- or another closed network setting. We plan to extend this experience among households or friends via social networks like twitter and facebook.

We can demonstrate this application in a real live setting, with several players playing along with their own personal second screen device. Player and audience will be challenged to critically think along in how this TV extension may open possibilities for TV formats or social interaction.

**ACKNOWLEDGMENTS**
This demo is part of TV-RING, a 7th Framework Program, DG Connect European funded Project.

**REFERENCES**