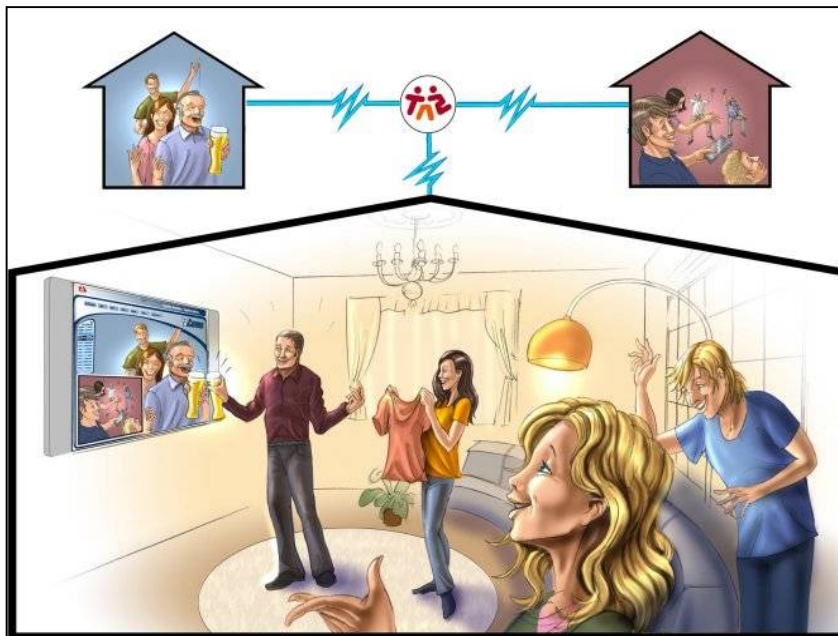




Content

TA2 - making communications and engagement easier among groups of people separated in space and time.....	1
Social Science Concepts for TA2.....	2
Re-defined TA2 concept demonstrators and use cases	4
TA2-Lite with Storytelling for easier deployment.....	5
TA2 at conferences	6
About TA2.....	7



TA2 - making communications and engagement easier among groups of people separated in space and time

Bringing families and friends closer together is the main goal of the European research project TA2 (Together Anywhere, Together Anytime). Since our last Newsletter in April 2010 the project has made significant progress towards this goal.

- More ground work on social science concepts and design methodologies has been carried out
- A deployable TA2-lite system has been defined and is being developed
- The TA2 use cases have been re-defined to ensure targeted user evaluation and feedback
- New cross-generation demonstrators “Storytelling” and “Music Tuition” are being implemented

More information is available on the TA2 website: <http://www.ta2-project.eu>

Public TA2 deliverables are available on: <http://www.ta2-project.eu/deliverables/deliverables.html>



TA2 Newsletter January 2011



Please visit our TA2 YouTube Channel “ta2project” to see illustrative videos of TA2 and its concept demonstrators.
www.youtube.com/ta2project



Social Science Concepts for TA2

The ultimate vision of TA2 is to support group-to-group communication and to provide the technical means to allow distant groups to improve their social relationships. Besides technical challenges there are underlying social science concepts, which guide us to achieve this goal.

Whereas most computer-mediated communication focuses on individual users, a major challenge for TA2 is addressing groups of people. Ultimately, we aim to support relationships within and between groups and individuals. However, we can only address these goals indirectly, by enabling new forms of communication. To inform our research directions, we need to understand the basics about how groups of people interact and how their shared interactions and activities can lead to reinforced relationships and strengthened identity.

The social science concept of social identity can help us to understand how individuals and groups define themselves, the boundaries to other social groups, and their interactions. In order to support relationships, we must also support identity formation and development.

The concept of interaction rituals helps us to identify certain characteristics that need to be fulfilled in a social activity, in order for it to positively contribute to relationship development and a meaningful shared experience from the participants. For instance, a communication channel such as an audio/video link is a necessary but not a sufficient condition. A mutual focus in a shared activity where participants are able to acknowledge each others' engagement and capture a wider range of social interaction is also necessary.

Social network analysis and the concept of strong and weak ties can give us further insight. While most online social media such as Facebook primarily caters for people's many weak ties, TA2 aims to primarily support the stronger relationships between close friends and families who might be hindered by geographical or temporal barriers. With TA2, we aim to develop ways that allow subjective experiences of shared social activities that are qualitatively similar to face to face social activities, thus supporting similar mechanisms for developing and nurturing identity and relationships as in the face to face meeting.

We acknowledge that relationships develop over long periods of time, with varying levels of engagement and commitment. In addition to allowing for intense, engaging real time interactions we wish to extend the reach of those moments by supporting reflection and engagement with memories and recorded events, as well as looking forward to upcoming events. For instance, the TA2 concept demonstrator “MyVideos” helps to guide authoring and shared watching of recorded events together, thus extending the reach of the past event, in time, and to other people who could not participate.

Orchestration

Remote, real time communication can generally be conceived as enabling shared conversation between the involved participants, as with for instance a phone conversation or a video conferencing system. With the focus on relationships and identity in TA2, we realized that we needed to move beyond the notion of shared conversation. Thus, we consider TA2 to be about enabling shared activities among groups of people. Not only enabling conversation but also shared activities have led to new requirements and innovations. For example, orchestration in TA2 stems from the need to present a common view of a shared activity that simultaneously takes place across several different



TA2 Newsletter

January 2011



locations. The challenge of orchestration is to present a shared view that must be coherent with the dynamic, unfolding social activities in order to be appreciated by the participants. In addition, the focus on enabling shared activities has led to our focus on games and other social activities, in line with interaction ritual theory.

Evaluations with real users

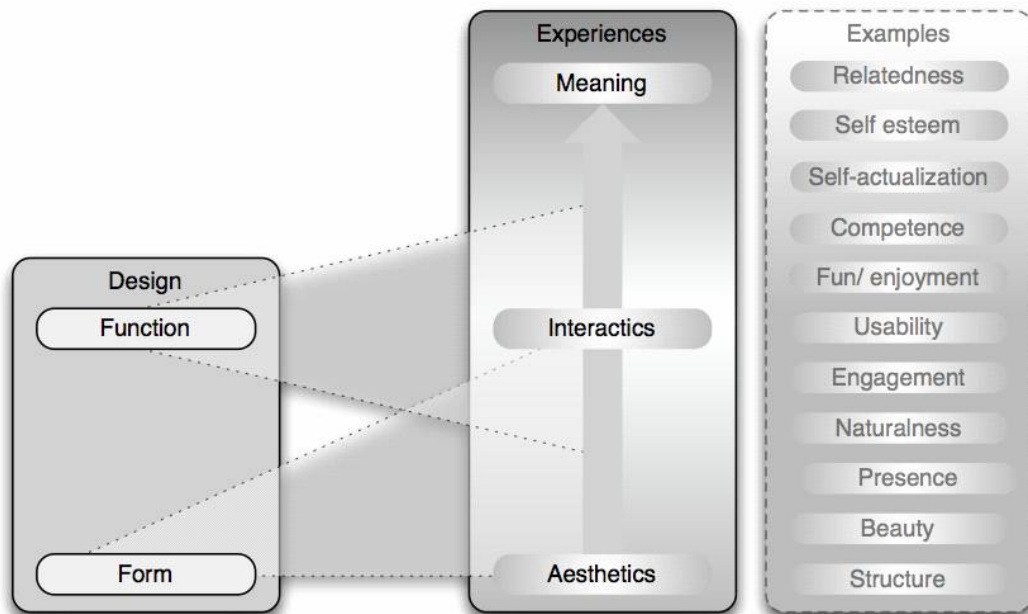
Besides the theory we are evaluating the social experiences and social interactions of real users and use the feedback to improve the TA2 design. Those user evaluations are being done in various formats, such as questionnaires, interviews, observations, video analysis.

Key aspects for these user evaluations are how users experience TA2 communication means in interaction. Mediated communication means are designed by creating

- A form - in the case of TA2 a social setting such as audio/video communication and different devices that support gameplay and communication.
- A function - the social interaction itself such as what topics are provided to communicate about? What can users do together?

Both the design of form and function result in user experiences such as having the feeling of being in the social space (presence), engagement in and enjoyment of the interaction and ultimately in the feeling of spending time together, relating to other people, appreciating relationships, etc. (see figure below).

As depicted in the figure below, TA2 aims to clarify this relation between the design of mediated communication means and resulting higher order experiences such as relatedness, social cohesion and the appreciation and enjoyment of relationships. Based on this, research guidelines for the design of form and function and therefore specific social experiences can be formulated.



The User eXperience Framework, based on the thesis work of Joke Kort (2010)








TA2 Newsletter

January 2011



Re-defined TA2 concept demonstrators and use cases

The technology developed for the TA2 project is being used to support a number of concept demonstrators and use cases. Those offer significant insights into the requirements for new media experiences among users. They are used to verify the societal and market related TA2 design principles, to get feedback from real users, and to prove the technologies being used. They have recently been re-defined to ensure targeted user evaluation and feedback.

<p>Improving social communication</p>		<p>The concepts of shared communication and 'remote-togetherness' in a trusted environment of family and friends provides a useful framework for studying social communication between families. By working with groups that know each other well, we will build an application that can make communication easier, more frequent, appropriate and effective. This application basically builds the "entrance" to the TA2 experience, as for example a lobby does.</p>
<p>Interactively Sharing and Enriching My Videos</p>		<p>Recognising the importance of looking at media together as a cornerstone for the sharing of family experiences, this TA2 application will provide tools and an infrastructure to help people develop and share short home movies with simple but meaningful interactive narratives automatically generated by the TA2 system.</p>
<p>Remote Playing of a Family Game</p>		<p>Games, think of parlour games like charades or board games like Pictionary, are one form of interaction that the family can enjoy together. The TA2 project is developing a game environment that supports such game based interaction between two or more teams of players situated in different physical locations. Early experiments have taught us that simple games will be easier to evaluate. The family game we are enabling thus uses a series of "mini-games" that demand high interaction and are highly visual.</p>
<p>Pairs Game (cross generation)</p>		<p>The simple but fascinating Memory game play provides opportunities across and within generations to spend time together. In TA2, Ravensburger have adapted the game for the screen; enabling users to upload their own images so these can be used as the image pairs. This adds personalisation to the game and, if you choose the images carefully, provides abundant opportunity to go "off piste" and to divert from the game to engage and chat with those with whom you are playing. TA2 took a version of the memory® game adapted for touch screens, combined with the ability to see and hear those with whom you are playing.</p>
<p>Music Tuition (cross generation)</p>		<p>Many of us will recall the pain and pleasure of learning a musical instrument as a child, or even as an adult. This TA2 application will integrate some key TA2 technology such as multimedia composition incorporated into existing video conferencing systems to aid in the remote tuition of music. The prototype research will provide extensions to existing video conferencing systems at Aldeburgh Music (a performance and training venue in the East of England) and will explore the usage and attitude towards these extensions with a view to exploitation with video conferencing providers.</p>



TA2 Newsletter January 2011



Storytelling (cross generation)



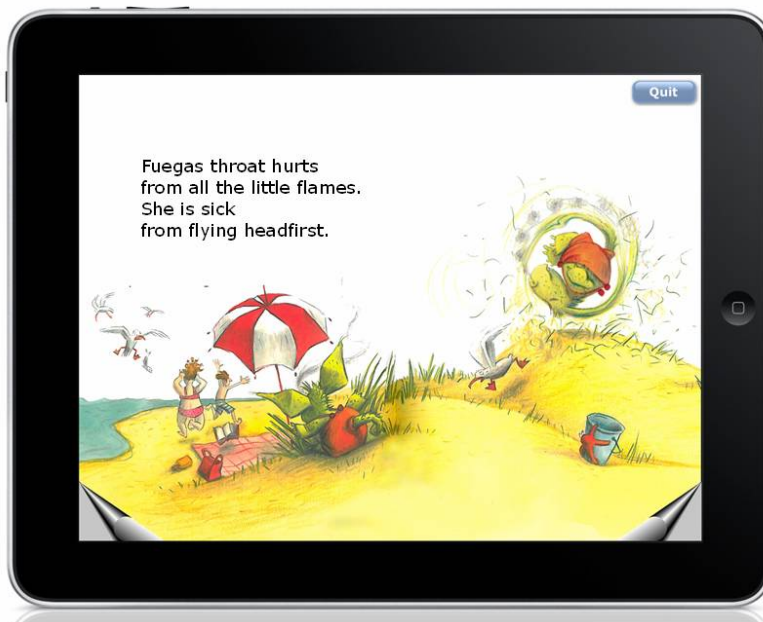
This application will allow people, whilst in different locations, to read a book together – like a bed time story - using a tablet based device. The story, chosen from Ravensburger's publishing roster, will be augmented using sound and graphical effects in order to transform the reading experience into something more colourful. The idea of the storytelling concept demonstrator is to allow parents or grandparents to spend time with children even when they are separated by the demands of work or living constraints.

TA2-Lite with Storytelling for easier deployment

Various TA2 partners have implemented comprehensive TA2 platforms and concept demonstrators in their ICT labs. For example Alcatel-Lucent in Antwerp, Belgium, BT in Martlesham, United Kingdom, Fraunhofer IIS in Erlangen, Germany. Those platforms are working in a lab environment but are not really useable for deployment in private households for longer tests. To close this gap, TA2 has developed "TA2-Lite", a limited version of the TA2 platform. TA2-Lite is working with one camera only, does not include automatic video orchestration, does not have full spatial sound, and has implemented only a few use case demonstrators. Plans are to leave a few TA2-Lite systems for some weeks at private households and collect the user feedback during and after this time.

The first concept demonstrator to run on the TA2-Lite platform will be "Storytelling", where for example an aunt reads a story to her nieces, as illustrated in the picture below.

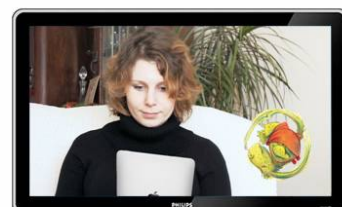
Auntie's and Nieces' iPad
(both sides are synchronized and show the same page)



Auntie's TV
(sees her nieces)



Nieces' TV
(see their aunt)





TA2 Newsletter January 2011



The basic TA2-Lite system provides HD-Videoconferencing through a PC which emulates a Set-Top-Box and is connected to the TV in the living room. It enables conversations “as if speaking in the same room” through HD video (720p25 H.264) and high quality audio (48 kHz stereo AAC-ELD) at very low delay (<150 ms). In addition, two iPads are used to not only display the story but also to work as an input-device. Both users can turn the pages as well as activate several hotspots with their fingers. Those hotspots bring the story to life by showing animations, playing sounds as well as displaying several key graphic elements on the TV-screen. Using HTML-Code downloaded from a standard web-server, additional books can easily be adapted for the Storytelling demonstrator. Even sound effects and graphics appearing on the TV-screen can be controlled using pre-defined Java-Script functions. Hence, a simple yet powerful API is provided for content creation which allows application designers to develop content for a truly open platform.

TA2 at conferences

TA2 has been very active at international conferences and trade shows. The list below shows a few highlights; for a full overview please visit

<http://www.ta2-project.eu/conferences/conferences.html>

Demo at the ICT Event 2010 in Brussels

(Photo by Milon Gupta, Eurescom)



If you have not seen a TA2 demo yet, Fraunhofer IIS will be showing its TA2-Demo at CeBit 2011 from 1 - 5 March 2011

13-17 December 2011	TA2 demo with focus on orchestration promoted by Alcatel-Lucent FI week , Ghent
11-14 October 2010	Enhancing Social Communication between Groups, Tim Stevens, BT ICIN2010 , Berlin, Germany
27-29 September 2010	TA2 presentation of two living rooms communicating and playing games ICT Event 2010 , Brussels, Belgium
26 September 2010	Understanding social experiences through social space and embodied interaction Joke Kort, TNO ICT Supporting real-time, mediated group activities using orchestration Rene Kaiser, JRS, II SISSI 2010 (workshop at UBICOMP2010), Copenhagen, Denmark



TA2 Newsletter January 2011



3-8 September 2010	HD Video Conferencing to Deliver Natural Communication Experiences to the Home TA2 demonstration on the Fraunhofer stand by Fraunhofer IIS at Internationale Funkausstellung (IFA) 2010 in Berlin
17 August 2010	Sharing TV Content, Sharing Experience Pablo Cesar, CWI University of Sao Paulo , Brazil
23-25 May 2010	In Situ Microphone Array Calibration for Parameter Estimation in Directional Audio Coding Oliver Thiergart, Fraunhofer AES Convention 128 , London, UK
26-27 April 2010	Web-Mediated Communication: in Search of Togetherness Pablo Cesar, CWI, BT Web Science Conference , Raleigh, USA

About TA2

TA2 is a large-scale Integrating Project of the ICT (Information and Communications Technologies) Work Programme under the European Community's 7th Framework Programme (FP7). It was submitted to the first call of FP7 and addresses objective 1.5 ("Networked Media") under challenge 1 ("Pervasive and Trusted Network and Service Infrastructures").

The project is partly funded by the European Commission.

TA2 is running from February 2008 to January 2012. Its overall budget is about 18 million euro.

14 partners from 8 European countries are involved in the project.

Further information is available at: <http://www.ta2-project.eu>

The next TA2 Newsletter is scheduled for October 2011