

Reality based video-prototyping

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Abstract. This video describes a cooperative design workshop on future mobile video communication for deaf people using sign language. One issue was to explore how an idea for a mobile interpretation-on-the-fly service could be designed for collaboration and communication. Besides the deaf sign-language users, other stakeholders participated, for example service providers and mobile phone manufacturers. The workshop started with users' narratives of their daily life. We encouraged them to narrate collaboration and communication situations that they had conceived as problematic. During the discussions after the stories were told ideas for solutions were constructed. Thereafter all participants collaborated in constructing video-prototypes, i.e. staged and videotaped visual representations of the ideas for solutions. The workshop methodology provided the telephone manufacturers, service-providers, etc. with first hand experience of the narrations and they brought the video prototypes into their own organizations for further development.

Workshop context, structure and results

This workshop was one in a series of workshops exploring how technology could enhance collaboration and other aspects of everyday life for people with disabilities. Two of these workshops explored the future use of video mobile phones with a group of deaf, sign-language speaking persons. Streaming video mobile phones means a revolution for the deaf community and they can talk to each other and their relatives at a distance. But this also makes collaboration with voice speaking people over a distance possible with the help of interpreters. Developers from mobile phone companies, service providers and authorities also participated in these workshops. The workshops included several methods, like telling narratives, brainstorming, building scenarios, video-prototyping, low-tech prototyping, etc. (Westerlund, 2003).

The methodology was inspired and developed from other uses of video artefacts (Cf. Mackay, Buur).

The methodology was technically simple. The objective was to ground the ideas in the lives of the participants. Instead of general descriptions that were reduced and without detail, we focused on actual descriptions of real situations that made sense to the participants. These narrations should cover the whole context of the situation. We encouraged the group to think of collaboration and communication situations that they had conceived as problematic. From that they made scenarios, both written and drawn and most importantly staged and videotaped them into video-prototypes. 'Quick-and-dirty' prototypes helped to illustrate the scenarios.

In one video prototype a deaf person is involved in an informal collaboration at work using a 'mobile interpreter at a distance', something not possible today. This gave the deaf person access to the hearing people's conversation and this also gave the hearing people access to the deaf persons opinions and thoughts.

Since all participants collaborated in the making of the video-prototypes, as actors, directors or cameramen, the event led to shared experiences where the understanding for all stakeholders' views and skills grew. The users found that their ideas were important for the developers. During these two workshops 14 video prototypes were made altogether. They all show ideas for meaningful solutions on how future mobile video telephony can support people using sign language. These results were useful for the developers who got a good understanding of the users' needs, desires, problems, etc. The relevant ideas on how to design future interpretation services will guide the development of this service. Other developers took the method directly into their own labs and used it for working closely with other users.

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References

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