



HaptiMap



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FP7 – ICT – 224675

HaptiMap

Haptic, Audio and Visual Interfaces for Maps and Location Based Services

Large-scale integrating project
Challenge 7 - Independent living and inclusion

D3.3 Workshop materials and results, addendum

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1. Introduction

At the yearly review for HaptiMap period 3 an analysis of the results from the HaptiMap WP3 workshops was requested. The present document provides this analysis.

2. Analysis of workshop results

The workshops have in general served several purposes. We have been able to discuss with the participants in order to obtain a better understanding of their working situations – their needs and problems. We have also been able to present our ideas and gotten feedback on how well these fitted with the industrial reality experienced by our participants – and we have also gotten suggestions from the participants. The initial workshops also served as a way of building trust and showing that what we were aiming at was relevant for their everyday work.

One can describe this process as a limited version of participatory design – given secrecy requirements (it was not possible to actually be in the environment working together with our industrial end users) we found this a working compromise. The workshops were complemented with meetings involving fewer participants – particularly the head of the usability division at Sony Ericsson and the head of the consultancy Right Professional together with one consultant from the same company provided valuable feedback at these meetings.

In the following we provide detailed information about each workshop.

WP3 workshop in Paderborn, on 17-18 March 2010 (SIEMENS, Nokia).

This was the first workshop in the process and several partners from the project participated (ULUND, SIEMENS and OFFIS) but we also had one invited participant from Nokia. At this workshop we discussed currently available methods and standards, but also what kind of problems one tends to encounter trying to promote accessibility in an industrial environment.

The workshop with the Swedish consultancy company Right Professional on 28 October 2009. This workshop focused on design methods taking the user into account. Right Professional has experience of mobile phone companies and has competences within interactive design and design processes for an optimized user experience. At this workshop we presented our ideas around user centred design (participants got D2.1) and discussed how these kind of methods could be adapted to the industrial practice. A general comment was that in general the kind of extensive user testing we promoted was difficult to get into industrial environments – several problems were put forward: lack of time, different departments having problems communicating, but also lack of motivation – is this really necessary?

The two workshops held with Sony Ericsson in Lund, Sweden, 1st of June and 26th of August 2010 attracted 26 persons representing developers and user experience experts (first workshop) and 17 persons, most of them interaction designers (second workshop). The workshops focused on user scenarios, non-visual interfaces and user

experience development. At this workshop we started by showing the video scenarios we had made, and continued with presentations showing why and how more modalities could be useful in interaction design. We also had one presentation about the value centred product cycle. The response from the participants on the video scenarios in particular was very positive – it was clear that these kind of short mobile situations provided quite a powerful means of getting the message across without having to talk too much about accessibility (which we tried, unsuccessfully, to promote at our first contacts with this company). Again the discussion revealed the lack of time, motivation and also the issues with communication between different group in a big organization. This workshop resulted in a design decision within the HaptiMap development team to focus on light weight methods which would not add any significant cost (time, effort, money). Given the good response to the video scenarios we also decided to focus on the nature of the mobile usage situations – letting the situational impairments experiences such users in such situations help the promotion of accessibility.

A small workshop with representatives of the Lorodux project in Hanover on June 11th 2010. The project coordinator, Ms. Annette Thurow and the main software engineer, Mr. Peter Wendorff, asked us for a workshop in order to incorporate our results and apply our development models in their project to develop a free mobile navigation solution for the blind and visually impaired. They were particularly interested in the design concepts used in different HCI modules in the toolkit and intend to use these concepts in their project. For the WP3 work this workshop provided a possibility to get input from persons in the open source community.

On June 16th 2010 we had a user group (elderly blind and visually impaired people) in our offices in Paderborn to demonstrate new concepts in using mobile devices and discussions about requirements, needs and wishes with regard to future navigation assistance solutions.

The advantage of this specific user group for the HaptiMap project was the diversity of the group with regard to age and experience in using new technologies. None of the users present had so far had any experience with mobile navigation solutions or modern mobile phones and all of them were after a relatively short period of time able to understand the concepts of the various user interactions and felt confident to use such devices and services by themselves. This workshop helped the WP3 work by allowing us to discuss the user requirements that we need to convey to the developers with a wide range of users.

On July 20th 2010 we held a workshop in Paderborn with representatives from Padersprinter (the local public transport company) and Höft & Wessels (a manufacturer of self servicing terminals). Topics included:

- new HCI methods for info terminals and vending machines
- incorporation of the Universal Design principals in existing development processes
- requirements of people with special needs and the elderly
- testing and evaluation methods

The workshop was initiated by Siemens after being made aware of the fact that the local transport company had installed new self servicing ticket machines which, according to their development decision, would be accessible for people with visual

impairments. After testing these new machines with self effected people we had to notice that this was not completely correct.

In the workshop we gave an in depth presentation of the needs and requirements of people with visual impairments and demonstrated their way of approaching such new devices.

Afterwards we presented the various results from the HaptiMap project especially in the area of new development methods and user centered design. The deliverable D2.1 was given to all participating developers and discussed in detail how to implement the methods in their specific development processes. Furthermore we emphasised the point of including users with special needs in the various stages of the requirement analysis, development phase and especially in the evaluation phase. We took extra care to point out that a broad range of people with special needs should be included in terms of age, experience and physical as well as mild cognitive limitations in order to achieve the goal of design for all concept. We are still in contact with them and accompany their efforts to design the next generation of self servicing ticket machines which, due to a regular product life circle will take some time before they will appear in the public. This contact allows the testing of the part of our design materials and recommendations for companies/developers already interested in accessibility.

A workshop “*Observing the Mobile User Experience*” was held at NordiCHI on 17th October 2010 in Reykjavik, Iceland. In this workshop 16 participants from industry and academia were brought together to exchange methods and experiences related to understanding the mobile user, the mobile usage and how to study and involve users in a truly mobile setting, including accessibility of mobile devices. The workshop contained presentations, discussions and an interactive session. The proceedings contain 13 papers from 9 different countries, which shows that the topic is of high interest at an international level.

<http://omue10.offis.de/> and <http://www.yourhost.is/en/nordichi-2010/w08-observing-the-mobile-user-experience.html>. This workshop served as a forum to exchange methods and ideas with both researches and industry practitioners. It also provided the HaptiMap development group with an overview of available tools and methods, and in addition we were able to test a workshop exercise aimed at letting participants plan a set of user studies for a specific task. The outcome of this exercise was mixed – the discussion provided useful input, but the exercise as such did not work all that well (this particular workshop exercise concept was dropped from further development).

A workshop “*Dynamic User Experiences*” was held with Sony Ericsson in Lund, Sweden (21 registered). The actual workshop took place in the next period (9th of September 2011), but planning and materials were prepared before (joint work with D3.2+D3.3). It followed the half day workshop agenda proposed in the Dynamic User Experience Workbook in deliverable D3.2+D3.3. During the workshop, participants worked in teams to investigate how people’s perceived value of products change depending on the context and situation of use, and to create practical approaches for how to implement value and context focused design in their everyday work practices. It also contained a “Context trails” exercise, an immersive method to gain insights through interactive, situated usage simulations of dynamic user experiences,

designed to provide a level of insight and understanding of situation-induced impairments. The workshop confirmed the usefulness of the basic tools designed in WP3. At a follow up meeting it turned out that in particular the context cards had found practical use (were said to be “brilliant”). Our workshop participants had in fact gotten their cards “stolen” by colleagues, and asked for additional card decks. It was stated that in contrast with the usual situation where they felt they had to push for mobile usability, the cards were attractive to a wide range of their colleagues. This was true also for the poster – colleagues would spontaneously come in, being interested in what the poster showed. The context trail was also said to be useful (generating surprising experiences even for expert on mobile development), but not to the same extent since more effort was required. The context transition scenarios were less appreciated and had not been used.

2. Conclusion

To conclude, the workshops have provided invaluable information & feedback needed for the development of our design tools. The early workshops allowed us to explore the design space and get an understanding of problems and possible solutions, while the later workshops allowed us to test and develop our design ideas. The workshops have also confirmed the usefulness of using enhanced user experience as a means of influencing organizations/developers not interested in accessibility (we have several examples where it has impossible to get acceptance promoting accessibility, but where enhanced user experience has worked).