

Umeme -project Final Report

Umeme -project | Final Report
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Abstract

The Umeme project was a sub-project of the Mediaspaces project in the ARKI Research Group, Media Lab, University of Art and Design Helsinki. The aim of the Umeme project was to map eco-systemic issues in the current digital media environment. The digital media environment of today's world was considered as a *nascent* form of the future Mediaspace.

During the Umeme -project, 12 people (one professional, 11 everyday people) were interviewed on their views and use of media and related devices.

During the interview, each interviewee wrote their thoughts on cards. Three kinds of blank cards were made: violet/problems, yellow/needs and orange/dreams.

Also, in the later part of the interview, 9 potential cards (blue) were introduced: I Create, I Find, I Collect, I Pay and Get Paid, I Re-Use, I Get Only What I Want, We Make Together, We Discuss and Comment, We Share. These cards were based on the 18 potentials by Kari-Hans Kommonen, the head of ARKI research group, and were used to inspired thoughts on the future possibilities.

The material from the interviews was analysed from four viewpoints. First, a *visual summary* was created to quickly summarise the topics of the interviews (Umeme-cardssummaries.pdf, 4 Mb). Second, *themes and topics* of the interview were summarized based on actual interviewee comments. Third, a summary of *daily use of media tools* was created and lastly a *summary of the Umeme potential cards* was compiled.

The last chapter discusses the *Interesting challenges for future research and design*. The topics were inspired by the interviews, and reflect the issues that were found most challenging/interesting. The issues include: *Only free online content is interesting*, *Physical products/real events vs. digital*, and *Focused vs. broad content: Only What I Want?*

Finally, the experiences from this research are discussed in *Lessons Learned*.

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Introduction

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During the interview, each interviewee wrote their thoughts on cards. Three kinds of blank cards were made: violet/problems, yellow/needs and orange/dreams.

Also, in the later part of the interview, 9 potential cards (blue) were introduced: I Create, I Find, I Collect, I Pay and Get Paid, I Re-Use, I Get Only What I Want, We Make Together, We Discuss and Comment, We Share. These cards were based on the 18 potentials by Kari-Hans Kommonen, the head of ARKI research group, and were used to inspire thoughts on the future possibilities.

You can see the visual summary of the cards in [Umeme-cardsummaries.pdf](#) (4 Mb). They can be also seen from the wall in the ARKI-room.

This document summarises the interviews in more detail.

Background

What was planned...

The Umeme project was a sub-project of the Mediaspaces project in the ARKI Research Group, Media Lab, University of Art and Design Helsinki. The project used the concepts from the Mediaspaces –project (such as the mediaspace) as building blocks.

The aim of the Umeme project was to map eco-systemic issues in the current digital media environment. The digital media environment of today's world was considered as a *nascent* form of the future Mediaspace.

The Mediaspace is a representation of the converged media environment, where software, rather than hardware, defines the boundaries and where there is seamless communication between people, and between technological solutions. In Mediaspace, media can be accessed in any form or format that is most convenient to the user.

The Umeme –project was initially planned to consist of two-part research: interviews of the professionals and user research. The professionals were planned to consist of digital media professionals outside and within Media Lab as well as from the industrial partner companies of the Mediaspaces project¹. However, due to scheduling difficulties, it was not possible to interview more than one professional. This turned the focus on the user research.

The purpose of the user research was to find out what issues there are in the daily life that hinders the everyday people's possibilities to use the digital media. The results of the user research were to be compared with the Potentials of the Mediaspace, developed in the Mediaspaces -project².

Due to delays in the interview schedules, it was not possible to present results already at the Media Lab Demoday (13th May 04). A poster about the project was shown, however. There were also plans for a Mediaspaces June Workshop, where also the Umeme interviews would be analysed. Unfortunately, the workshop was never organised.

The Umeme project finished successfully, and results can be read from this document.

¹ Such as Digita, Helsingin Sanomat and NVO.

² Potentials of the Mediaspace: *Redistributable, Reconfigurable, Shareable, Individual, Changing, Organizable, Navigable, Appropriate, Diverse, Software, Open, Unbounded, Introduction, Structured and Semantic.*

Methods

What was done...

The Umeme project began (in Mar 04) with reviewing the previous ARKI research and the sub-projects in the Mediaspaces –project. From the review, the 18 Mediaspace Potentials³ emerged as the most important conceptual framework to act as the basis for the interviews.

In order to inspire people to discuss about difficult subjects such as the future and the hazy amoeba called “media”, it was decided to use props in the interview (see e.g. p92-93, Keinonen & Jääskö, 2004)⁴. Thus, the Umeme card-interview method was developed (during April-May 04) to engage interviewees in a more reflective and potentially creative process. The IDEO Method Cards⁵ and Flowmaker design cards⁶ were used as inspirational material for the card-interview method.

The Umeme cards had four categories: Problems, Needs, Dreams and Potentials. These categories were chosen to inspire discussion on current (= problems/violet), near-term (= needs/yellow) and long-term (= dreams/orange) issues and desires of the everyday life. The

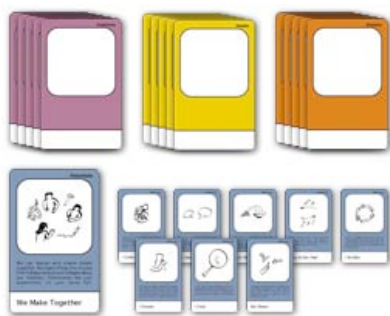


Figure 1: The Umeme cards

Potential –cards (blue) were used to introduce the key concepts of the Mediaspaces –project (namely, the Mediaspace Potentials). Instead of directly copying the mediaspace potentials into cards, the Potential –cards were designed to be more concise and closer to everyday life (See *Appendix 2: The Mapping of Mediaspace Potentials into the Potential Cards*).

For each interview, there were 24 Umeme-cards consisting of 15 blank cards from Problems, Needs and Dreams categories (5 each) and the 9 Potential cards (see *Appendix 1: The cards used in the interviews*). The interview had two main phases:

In the **first phase**, the interviewee was asked to write and/or draw on the blank cards any thoughts, opinions, ideas or issues that she had related to media and related tools. Whenever there was a situation where the interviewee couldn't come up with anything to talk about, the interviewer asked questions related to the everyday use of media and tools. The open-ended questions were based on a checklist shown in *Appendix 3: The Interviewer's checklist*. At the end of first phase, the interviewee was asked to arrange the cards she had created into groups by similarity. After that, the interviewee was asked to name the groups and describe them. Photographs of the groups were taken.

In the **second phase**, the interviewee was asked to look through the potential cards one by one and to give her opinion, whether and how the potential related to her everyday life. After all cards have been read, the interviewee was asked to arrange all the cards she had created and the potential cards into groups by similarity. Then, as with the first phase, the groups were named, described and photographed.

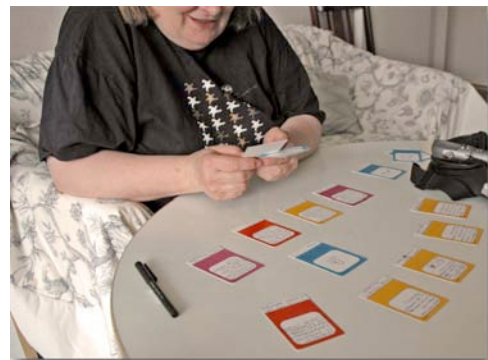


Figure 2: The Interview

³ Mediaspace potentials; described by Kari-Hans Kommonen in internal ARKI documents 22.02.2004

⁴ Keinonen, T., Jääskö, V. (eds. / 2003): Tuotekonseptointi. Teknologiateollisuus.

⁵ IDEO Method Cards are available from www.ideo.com

⁶ Flowmaker – A Design Tool by WeMake, www.flowmaker.org, ISBN 0-9547337-0-3

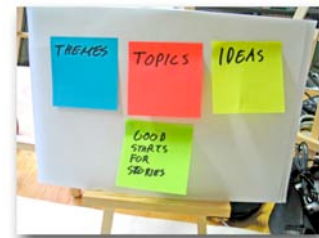
Additionally, a **brainstorming workshop** was held in June, to share the data from the Umeme interviews with another Mediaspaces –project: the Mediaspace Scenarios. The brainstorming was conducted in two consecutive days, about six hours per day, including several breaks.



The aim of the workshop was to both provide concrete data about the interviewees and serve as a source for inspiration for the tentative stories that would eventually be designed into scenarios.

The brainstorming was divided into four phases that were represented by four levels (or colours) of sticky notes. There were 3-6 participants in the workshop; some were present only part of the time.

In the first phase, pre-selected excerpts from the interviews were varyingly read-aloud or listened-to from tape (and translated into English from Finnish). After the 5-20 second excerpt, the brainstorming participants wrote down ideas on yellow sticky notes, one per each. An idea would be just something the participant would consider interesting or important. After 30-45 minutes, the ideas were grouped by affinity and categorized into topics (i.e. red sticky notes). The topics would have an emphasis on highlighting phenomena, attitudes and/or behaviours. At the end of the both days, higher-level themes (blue sticky notes) were identified from the topics and ideas. The themes would describe trends or other higher-level phenomena.



Finally, green stickers (“good starters for stories”) were written 1-3 per a theme that transformed the themes and the related ideas and topics into concrete proposals for stories. The stickers were then documented into the project website and the story/scenario development continued further at the site.

Results

What was gotten out of it...

The material from the interviews was analysed from four viewpoints. First, a *visual summary* was created to quickly summarise the topics of the interviews. Second, *themes and topics* of the interviews were summarized based on actual interviewee comments. Third, a summary of *daily use of media tools* was created and lastly a *summary of the Umeme potential cards* was compiled.

Visual Summaries

Visual summaries from the interviews can be read in *Umeme-cardsummaries.pdf* that shows the themes and topics as described by the interviewee in each interview. For each person, there are two pictures, one taken at the end of the phase 1 of the interview and the second taken at the very end of the interview.

The visual summary provides quick profiles to each interviewee and can thus be used for example as user profiles for design. The *Figure 3* shows the typical visual summary.



Figure 3: An example of the visual summary taken at the end of the interview

Themes and Topics

In addition to the basic statistics, themes (more generic phenomena) and topics (detailed issues) were identified from the cards and the discussion transcripts. The basic statistical summary of the interviews (12 persons) can be seen below, in *Table 1*.

Age Range (years)	Age distribution (years)				Gender (Male/Female)	Interview length (each)	Cards (each)	Topics (each)	Themes (each)
22-70	6	2	1	3	5 / 7	1-2 hours	2-10	5-10, avg:7,4	3-7, avg: 4,3

Table 1: The basic summary of the Umeme interviews

General **themes** were identified both from the topics and from the descriptions of the groupings the interviewees had made. These are summarized in *Table 2*.

The most often discussed themes were *'The need for better technology'*, *'Easy to use'*, and *'Quality collections of content and themed information'*. These reflect the thinking that although media content and tools are being made, they do not serve the needs of the people. Making things better, however, is not straightforward as it is not always clear, what (in detail) should be done.

Many interviewees also mentioned issues related to *'Management of information'*, *'Easy access from anywhere'*, and *'My dream device'*. While quite close to the first set above, these themes especially highlight the people's need to bring order (and control) to the almost chaotic jungle of digital media and tools.

And finally, some interviewees took a broader perspective and talked about issues that (among other less prominent) could be characterized under themes: *'Things should just work together'*, *'Ways to support design'*, *'Sharing my life digitally'*.

Themes summary

Most discussed:
The need for better technology, Easy to use, Quality collections of content and themed information

Many mentions:
Management of information, Easy access from anywhere, My dream device

Some mentioned:
Things should just work together, Ways to support design, sharing my life digitally

Table 2: Summary of the themes

To summarise the **topics**, the issues discussed by the interviewees were collected both from the transcripts of the interviews and from the cards that the interviewees had made. These issues were then categorized by affinity. In the following, the 11 most discussed topics (with interviewees' comments) are listed in the order of popularity.

Interviewees comments on '(Overall) Usability / Easy to use'

"I'd call it *Overall Usability*, like today's Digi-TV... All the antenna questions... what should be installed, is it DVB-T or -C, should I have a return channel, should it have harddisk, do I buy MHP or... ..It's the overall impression of how things work." (H1) (H10)

"[media] content should be easy to find... and storing should be easy." (H1)

"Things should be easy for the consumer, not just easier, but simple." (H1)

"Things should be like driving a car. During the last century, we have developed this culture that we know how to go around and we have car parks etc... You know that there's a wheel, pedals and gear stick in the car. It's not like every car is completely different... Things are not in different order or different locations. It should be the same with these [media] devices." (H1)

"Printing fotos from digicamera..." (H2)

"Cords..." (H3)

"Things should just work. I have no need for devices that do not work with others." (H3)

"With my laptop, I don't want to spent a lot of time just to get things ready so that I can do what I want. Like setting up connections and cables." (H9)

"Manuals for devices are written by completely own species of humans. Especially the translated manuals. They are not suitable for normal people." (H9)

"Recording TV programs is a huge mess..." (H4)

Interviewees comments on 'Easy access from anywhere'

... this topic is shown in detail in the *Summary of the Potentials*...

Interviewees comments on 'Interoperability'

"Like... Where can I store my things? Should I use PC... could I network my devices together? ... Lot's of stuff is available, but regular person cannot take advantage of it" (H1)

"1-for-all remote control..." (H3)

"laptop, pc, mobile phone etc. would just work with each other... and share my music etc." (H7)

"... that mobile phone would work with my device(s) at home..." (H9)

Interviewees comments on 'Unique end user experience'

"Instead of movie dumbed down for all, we could have this real sense of personally tailored service/media for you... Like you had in the story-books where you choose paths depending how you wanted the story to progress: if yes, go to page 32, if no go to page 50. (H7)

Service attitude: "Devices are made and media produced with the attitude of just getting lots of money out of consumers. And then there's the aim to cause addiction in the users... This does not serve people. It deprives them of time, money and free thought." (H1)

TV-fees payed according to need/use: "... I watch TV, but there are unnecessary programs... At least student discount should be available." (H2)

TV-program schedules: "The programs that I watch... should be shown earlier than in the late evening... It should be possible to serve the needs of the different viewers." (H2)

"I want **Culture-TV** [*sivists-TV*]. You would get good, quality news and current topic – reportages. And good fact/professional-discussion programs. But in addition to these, also other aspects of the culture, like quality drama movies, music and nature/culture reportages/programs. (H9) (H10)

Interviewees comments on 'Cheaper fees'

... this topic is shown in detail in *Summary of the Potentials...*

Interviewees comments on 'The computers are not reliable / Faulty technology'

"Programs... tilt" (H2)

"Intranet just doesn't work sometimes..." (H2)

"floppies just break suddenly..." (H2)

"When I send an SMS (or email) with my phone I assume that it gets through. But then it doesn't and my friend will be very angry to me, because she finds out later that she didn't receive the important message. But I did everything I could!" (H7)

"I sometimes get this feeling of <twilight zone>. Days (events) might disappear from my (digital) calendar or something..." (H7)

"Technology does not work... or let's say it does not work reliably for everybody..." (H1)

"Webpages don't always work, a plugin might be missing or something" (H5)

Interviewees comments on 'Easy to find anything'

... this topic is shown in detail in *Summary of the Potentials...*

Interviewees comments on 'Organising'

... this topic is shown in detail in *Summary of the Potentials...*

Interviewees comments on 'Recommendations'

... this topic is shown in detail in *Summary of the Potentials...*

Interviewees comments on 'My dream device'

"Small, high quality, easy to use, stylish, ..., works with computers, fits to pocket..." (H6)

"One multipurpose device, stylish, I can watch TV, listen radio and do computer things with it. Doesn't make my room look ugly. ...I would like to have it small, like small portable TV..." (H9)

"It should not be one specific device, but [a set of technologies] that allows me to have distributed access so that I can access all my stuff in one place." (H3)

Interviewees comments on 'Peacefulness - Not always connected'

"I feel that I'm in a hurry all the time, if I answer to the phone everywhere... while travelling, off-work etc. People should not wonder if I don't always answer the phone" (H2)

"In some situations, it would be great to be always-on without needing to carry monstrous laptop and wlan with you. But it should exist only when you definitely need it, so it could be called *almost-always-on*." (H3)

Use of Media Tools

Most (8+):
television, mobile phone, email, web browsing

About half (5-7):
news paper, web news sites, digital music

Few (1-2):
instant messaging, chatting, gaming

Daily use of media tools

The interviewees' views on tools of digital media were analysed by examining what were described as the daily tools to use or produce media. The following summary does not comprehensively represent all the tools the interviewees use. Rather, it represents what tools were seen as having relation to media.

Most of the interviewees (8 or more) mentioned *television, mobile phone, email* and *web browsing* as the main tools. About the half (5-7) of the interviewees also mentioned that they read regular *news paper* as well as *web news sites*, and listen to *digital music* (mp3s etc). Only few (1-2) mentioned *instant messaging, chatting* or *gaming*. This may be, because the interviewees not consider those activities as being related to media.

Summary of the Potentials

The *Figure 4* summarises the interviewee's views on the Umeme Potential –cards.

The views were rated between –1, 0 and +1. The +1 or –1 meant clear opinion for or against the card. The 0 meant no opinion or mixed opinion.

In the following, the Potential cards are discussed in more detail.

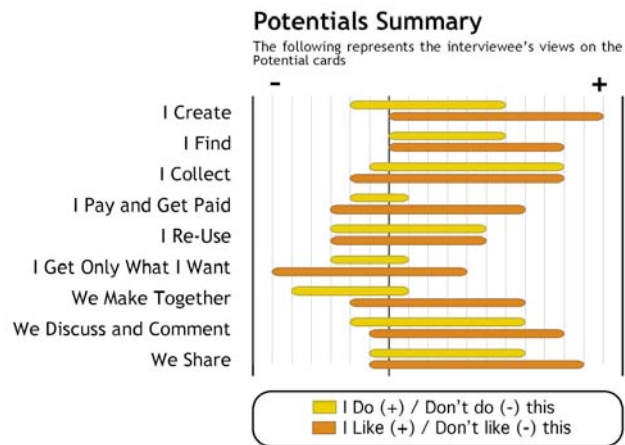


Figure 4: Summary of the Potential cards



I Create (card text: "I record to video things that happen around me. Sometimes I make them into home movies. I take pictures and sometimes even record sounds from my environment. I might make music.")

The 'I create' –card was received very positively. Most of the interviewees were interested in the (future) possibility to easily create own pictures, movies and other media. Several people were already using digital media to create their own things, for example digital pictures in order to communicate with others. Many people expressed their lack of talent to do anything creative. This is, however, seen sign of strong self-criticism rather than actual lack of skills.

I Find ("I can easily find anything, even if I remember only bits and pieces. From one place I can search through e.g. email, phone conversations and movies.")



The 'I Find' –card was generally received as something already existing, thanks to Google and other sophisticated search engines (e.g. reittiopas.fi). The idea that voice (such as phone conversations) could be also searched (and archived) was a completely new idea, and was liked. This card was received positively and most people felt they were already doing this.

Interviewees comments on 'Easy to Find anything'

"I try to find a song; it might be on a computer, or on a CD, DVD... or I might have seen it in TV or read from a paper, so I don't have it. How to find and get that song?" (H3)

"There should be a program guide, so that I can find all my stuff (i.e. media) and other stuff" (H9)

"I know there's lot's of interesting stuff in the world, but I can't access it. For example TV documentaries in other countries." (H4)

"I have this dream that whenever something is produced somewhere, I would be able to buy/get access to it." (H4)



I Collect ("I have my own media collections. Professional archives neatly contain all my work. Personal collections consist of e.g. a diary, notebooks, and media albums.")

Similarly to 'I Find', the 'I Collect' –card was received as something familiar and already being done. Some of the interviewees felt that they don't want to spend any time to organize the collections that they have; everything should be automatically put into some categories and then just searched. Very often interviewees ended up discussing the problem that their media is stored in more than one place and that makes everything complicated.

Interviewees comments on 'Easy access from anywhere'

"I have so often this situation that I'd like to listen a CD or a mp3 song while e.g. at work and I only have the song at home, or in the car or... Media should allow for distributed access but not be dispersed in many locations." (H3)

"Some sort of one-stop solution; so that whatever you might carry with you would somehow interact with each other." (H3) (H7)

"So all the passive media, what you consume and also active media, like web, email etc... There would be equal possibilities to access all this media both mobile and locally" (H3) (H4)

"It should be possible to store everything (sound, pictures, text etc.) in one place...and store old things like vinyl records also..." (H9)

Interviewees comments on 'Organising'

"I already have huge bags of videotapes... I am too lazy to label them all, but I would really like to store them, with nice indexes... and fotographs too." (H1)

"I don't want to have huge piles of pictures in my computer. I can't find anything from there." (H4)

I Pay and Get Paid ("Some media is free, some I have to pay for a little. Also, I can share my media freely or charge a bit. Paying is very easy, often automatic.")



The 'I Pay and Get Paid' was among the most controversial cards. While it was generally seen that easy ways of payment are needed to make the commercial aspects of the web popular, at the same time the interviewees were not very interested in spending money in the web. Internet was considered as a place of free and almost free content and services. The only commercial web services used by many were basically bank services and amazon.com.

Interviewees comments on 'Cheaper fees'

"Internet-connections are too expensive" (H2), (H6), (H9)

"High-profile Hollywood movies are not worth the money. Maybe movies would be better with smaller budgets (and resulting to cheaper movie theater tickets)" (H7)



I Re-Use (“There is endless amount of music, pictures and movie clips that I can use. I take snippets from various places to enrich and illustrate my messages and media works.”)

The interviewees’ opinions on this card were mixed. Some liked the concept and were using (especially pictures) as material for their own works (and as clip-art for emails). Others did not like things like clip-art at all and did not see any value in the concept. Concerns were also raised that although there was lots of material available in the net, it was very unclear what could be re-used and what was not allowed.

Interviewees comments on ‘Copyrights’

“...it’s of course sensible to have control [on copyrights]... , but then there are these juridical hegemonies that concentrate on laws so much that people’s living begins to be impossible; all the time something is breaking some law even when living a normal life.” (H1)

“... it can’t be that consumers have to read thousands of pages of legal documents... after that they would be so scared they would do anything [with digital media]...” (H1)

“It was so simple in the 80s with cassettes. You could use it and make copies. Nowadays everything is so complicated. Things should be easy again.” (H4)

I Get Only What I Want (“I don’t have to spend time in searching or choosing the news and media that I receive. I only get things that I am interested in, thanks to my friends making ratings and recommendations.”)



The ‘I Get Only What I Want’ was felt as the most controversial of the Potential cards. Many said that getting only what one wants (and not any noise) is an appealing idea *in theory*. BUT, this could easily lead to the situation, where everything is filtered too much, resulting into very limited view of the world. This issue is discussed more in *Broad vs. Focused* in Discussion. This card was the only one that was disliked more than liked.



We Make Together (“We can design and create media together. We make things like movies from holidays and picture collages about our hobbies. Sometimes we just experiment to just have fun.”)

The ‘We Make Together’ –card had the strongest difference between doing and liking. That is, the concept was liked quite much, but only a few said that she does this kind of activity. Reasons for this may be that 1) current media tools do not facilitate enough co-operative activities and 2) the interviewees either had no children or their children had already moved away (nobody mentioned that her family does home videos).

We Discuss and Comment (“We discuss together about issues important to us. We review and recommend products, movies and music that we especially like or dislike.”)



Similarly to ‘I Find’ and ‘I Collect’, also ‘We Discuss and Comment’ –card was considered familiar concept and something that is already done. It was received very positively and was referred to as being one of the basic needs of humans. However, some interviewees preferred traditional (face-to-face, phone) ways to interact with other people, and were not interested in the net discussions.

Interviewees comments on ‘Recommendations’

“There are communities and other groups with common interests... So if I would say that this is a good thing, then that information can be communicated to others... such metadata. Then this would make it easier to find things that are interesting.” (H1) (H7)



We Share (“I show my holiday pictures and movies to friends and others. I might write a web diary. When I hear or see an interesting movie or song, I share it with my friends.”)

‘We Share’ –card was generally met with positive attitude. Interviewees commented that they were liked to share photos, such as holiday pictures, with their friends and relatives. The possibility of sharing music or movies that one likes was not met with equal enthusiasm. This may be because such media is much more dependent on ones taste. Also, a few mentioned the potential problems with sharing copyrighted media.

The brainstorming workshop

The workshop produced 103 ideas (yellow stickers), 17 topics (red), 11 themes (blue) and 4 storylets (green). It should be noted that most of the storylets did not end up in green stickers. In fact, 24 stories were created in the Mediaspaces scenarios project after the workshop. The brainstorming inspired more than 60% of those stories. The brainstorming participants considered the workshop successful and inspiring.

The detailed description (and analysis) of the stories is unfortunately out of scope of this document.

Discussion

The goods and the bads...

In overall, there was somewhat negative attitude towards technology; it was felt unreliable, and people felt they could not trust it. Although perceived useful, current tools were felt (at the same time) complex and inadequate or not useful for ones personal purposes.

Only few computer things receive high praises from interviewees: google and reittiopas.

The following last chapters present the final words of the Umeme -project. With a view to the future, a few ideas are proposed that seem to be among the more challenging issues. The final chapter 'Lessons Learned' describes experiences from the project.

Interesting challenges for future research and design

In the following, four topics are discussed that raise questions and challenges for future design and research. These topics were inspired by the interviews, and reflect the issues that were found most challenging/interesting during the research.

Only free online content is interesting

While it is entirely possible that these attitudes change in the future, currently however, people tend to only use free online content (when it is available). Compared to the traditional media, there is much more alternatives (e.g. news sites). Also, since for fee-based sites require logging in, people may find using them to be too much trouble. So far, there doesn't seem to be enough value (compared to the free sites) to make the payment worthwhile.

I read YLE news [in the net], Hesari doesn't let me read... Although I read the paper version (H5)

Physical products/real events vs. digital

There is ongoing negotiation within people between physical and digital products and how they relate to each other. Physical products embody stronger sense of ownership. They are, for example, frequently used as a way to 'support the creator of the product'. Physical objects also have additional tactile and physically emphatic (e.g. worn-out furniture) values that do not presently manifest in digital objects. It is also easier to maintain the sense of what physical objects one has than with digital things.

Also real, live performances are seen as something more than equivalent digital recording of such event. Live shows seem to convey the feeling of personal, for-me experience whereas digital recordings are seen as bulk, mass products.

Physical products are also typically more malleable and support easy, creative "misuse". Digital products often must have these "features" coded in beforehand. For example:

I like to make notes with regular notebook, because I can do drawings on the sides and use of different pen types/colors and paper materials. It is also more intuitive and fail-safe. (H7)

Digital products, on the other hand, are seen as objects that are easy to manage, transfer, store, organise and share. Although rapidly growing pile of digital objects may eventually become very difficult to manage.

Instead of trying to force either-or decisions between physical and digital, perhaps a direction should be sought where digital and physical products would be used in complementary fashion. One such example was mentioned by one interviewee: there was an "book-at-a-time" –experiment by the city culture week in which one could order freely available (out-of-print) digital texts or one's own texts as books. Books were printed in regular fashion in real print press. One could order just one book or more, up to few hundred.

Focused vs. broad content: Only What I Want?

As already mentioned in the *Summary of the potentials*, the 'Only What I Want' –potential card was one of the most controversial concepts. Many interviewees initially expressed their interest in somehow magically get only interesting stuff to oneself. However, they were concerned that eventually this would make people unaware of what really happens in the world. Interviewees felt that they wanted to be exposed to unexpected, sometimes even unwanted things, *within reasonable limits*. This allows the possibility to expand one's point of view and to venture into new areas.

The Helsingin Sanomat –newspaper was mentioned as an example that allows one to browse through lots of things (but within limits) and selectively choose the things that one wants to read.

Grandma-sharing

As a challenge for design to help to build a society where older people are not left to the other side of the digital divide. As a funny example, but with serious undertone, an interviewee invented rent-a-grandma –service. It is an effort to combine lonely people needing social contact and the “armies” of old people, who have lot of thoughts to tell and lot of time to spend. Thus, people who have the need to extend their network of relatives could get a grandma from a service :).

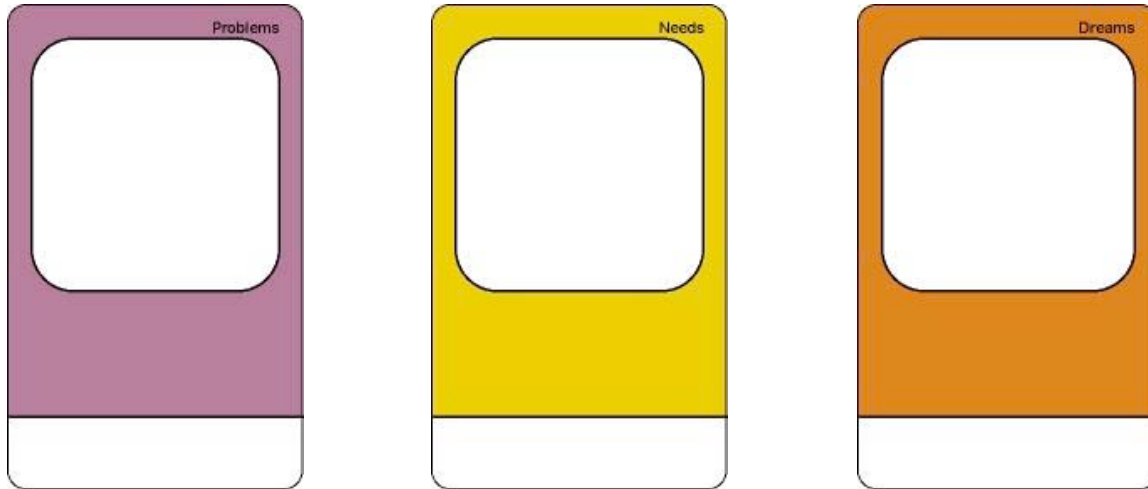
Lessons learned

The Umeme method, i.e. the Problems-Needs-Dreams-Potentials –card interview





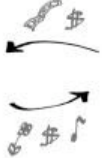




Problems-Needs-Dreams-Potentials –card interview is well suited for people who are willing to do self-reflection during the interview and who have interest in the future and change (the interest can be both positive or negative). On the other hand, people who are not willing to say anything about themselves and/or are perfectly content with the way things are currently, do not provide much data to this kind of interview.

Appendix 1: The cards used in the interviews

The blank cards (5 each):



The Potential cards (9):

<p>Potentials</p>  <p>I have my own media collections. Professional archives neatly contain all my work. Personal collections consist of e.g. a diary, notebooks, and media albums.</p> <p>I Collect</p>	<p>Potentials</p>  <p>We can design and create media together. We make things like movies from holidays and picture collages about our hobbies. Sometimes we just experiment to just have fun.</p> <p>We Make Together</p>	<p>Potentials</p>  <p>We discuss together about issues important to us. We review and recommend products, movies and music that we especially like or dislike.</p> <p>We Discuss & Comment</p>	<p>Potentials</p>  <p>I don't have to spend time in searching or choosing the news and media that I receive. I only get things that I am interested in, thanks to my friends making ratings and recommendations.</p> <p>I Get Only What I Want</p>	<p>Potentials</p>  <p>Some media is free, some I have to pay for a little. Also, I can share my media freely or charge a bit. Paying is very easy, often automatic.</p> <p>I Pay & Get Paid</p>
<p>Potentials</p>  <p>There is endless amount of music, pictures and movie clips that I can use. I take snippets from various places to enrich and illustrate my messages and media works.</p> <p>I Re-Use</p>	<p>Potentials</p>  <p>I record to video things that happen around me. Sometimes I make them into home movies. I take pictures and sometimes even record sounds from my environment. I might make music.</p> <p>I Create</p>	<p>Potentials</p>  <p>I can easily find anything, even if I remember only bits and pieces. From one place I can search through e.g. email, phone conversations and movies.</p> <p>I Find</p>	<p>Potentials</p>  <p>I show my holiday pictures and movies to friends and others. I might write a web diary. When I hear or see an interesting movie or song, I share it with my friends.</p> <p>We Share</p>	

Appendix 2: The Mapping of Mediaspace Potentials into the Potential Cards

Potentials	Keywords	Meanings to the User	Themes	I / We perspective
Individual	> Personal Mediascape	> My (view to) Media	> Personal	>
Changing	Evolving media, subject to change. Different versions.		Re-use, building blocks, links	
Interconnected	Media is connected/linked to each other. New tools. Authors, viewers, companies create links		Collaborative Creation	We Make Together
Diverse	> Social innovation, > Lots of media about everything possible, tools	>	> User-created Content	> I Create
Reconfigurable	Existing media is used to create new media	Cut-n-paste media, media snippets		I Re-Use
Shareable	Media can be shared with anyone	Communities; shared media, recommendations, reviews	Community	We Share
Redistributable	> Many licenses, re-editing etc.. > Automatic compensation	> Easy use of others' media, I get compensated for my media automatically	> I spend and get paid a little and can use almost all media... / Automatic compensation	> I Pay and Get Paid
Available	Way of identifying -> way of finding. No "lost" media	Easy finding and retrieval of media	Findable/reachable	I Find
Unbounded	> No containers or packaging, no control of the channels	>	>	>
Structured	Media structures for digital processing			
Semantic	metadata	Media descriptions		
Open	> Open for all, everybody have possibilities to create media	>	> For everyone, participation	> We Discuss and Comment
Navigable	Not only linear media, but navigable	Shuffling through media, "only the interesting bits", no ads	Only What I Want, "quick-use" of media	I Get Only What I Want
Software	Media nears software and vice versa	Navigability, building interaction	Interactivity	
Appropriate	> Using any format suitable, products with "multiple media delivery" capabilities	> "one tool to do it all"	> New tools	>
Organisable	Reasonably easy to make collections of media.	Professional/personal archives, meeting notes, messages, reports, diary, notebook,...	"Extended" memory	I Collect
	> => filters, searching not categorising...	>	>	>

The column legend:

Potentials The Mediaspace Potentials by Kari-Hans Kommonen (22.2.2004)
Keywords Keywords extracted from the Mediaspace Potentials descriptions by Kari- Hans Kommonen

Meanings to the User
Themes
I / We perspective

Short translations of the *Descriptions* into everyday life
 Themes that emerged from the *Meanings of the User*
 The *Themes* translated into personal/group view points, i.e. I do or We do

Appendix 3: The Interviewer's checklist

Esittely

- Haastattelu kuuluu projektiin nimeltä Umeme, jossa olen tutkijana.
- Umeme on yksi osaprojekteista TaiKin Medialaboratorion Mediaspaces –projektissa, jota johtaa Kari-Hans Kommonen
- Tällä haastattelulla kartoitetaan uuteen mediaan liittyviin **sisältöihin** ja **laitteisiin** kohdistuvia **ongelmia, tarpeita** ja **haaveita**.
- Tarkoituksena on käsitellä aihetta laajasti; voit kertoa esimerkiksi:
 - Kokemuksiasi laitteiden ja ohjelmistojen käytettävyydestä tai yhteensopivuudesta,
 - Uuteen mediaan liittyvien ryhmien ja organisaatioiden vaikutuksesta
 - Tekijänoikeus/lisensointiasioista
 - ...
- Lämmittely: kerropa lyhyesti kokemuksistasi median kanssa viimeisen viikon ajalta

Vaiheet:

- 1) Esittely
- 2) (lämmittely +)
3* 3-4 kortin täyttö
- 3) ryhmittely; toisiinsa liittyvät kortit ryhmiin ja sitten ryhmät tärkeysjärjestykseen
- 4) Potentiaali-korttien läpikäynti ja samalla niiden lisääminen ryhmittelyyn
- 5) Loppukommentit

Kortit

- Neljänlaisia kortteja, kolmea laatua täyttää haastateltava
- Kortteja saa täyttää vapaassa järjestyksessä (3-4 per laji)
- Kortteja täyttäessä tulisi mielellään kommentoida lyhyesti kyseisessä Kortissa käsiteltävää asiaa
- Kortin alareunaan kirjoitetaan otsikko/slogan
- Keskelle tulisi piirtää kuva aiheeseen liittyen tai voi myös kirjoittaa tekstiä (esimerkkinä potentiaalikortit?)

Topics / Digital Media related tools/practices:

- fixed-line/mobile phone
- dvd (movies)
- cd (music etc.)
- fotoalbums
- chatting
- video camera
- kitchen machines (e.g. fridge)
- computer
- walkman/cd-/mp3-player/etc
- iPod
- shopping
- working (workplace)
- PDA

Topics / Additional personal media (non-digital, but important):

- Notebooks
- Calendars
- Addressbooks
- Archives of press articles / recipes / letters
- Books / magazines
- Notes / stickies
- To-do lists
- Maps / directions

Appendix 4: Quotes from the interviews

The following lists all the topics discussed in the interviews, ordered by popularity.

(Overall) Usability / Easy to use

"I'd call it *Overall Usability*, like today's Digi-TV...All the antenna questions...what should be installed, is it DVB-T or -C, should I have a return channel, should it have harddisk, do I buy MHP or... ..It's the overall impression of how things work." (H1) (H10)

"[media] content should be easy to find... and storing should be easy." (H1)

"Things should be easy for the consumer, not just easier, but simple." (H1)

"Things should be like driving a car. During the last century, we have developed this culture that we know how to go around and we have carparks etc... You know that there's a wheel, pedals and gear stick in the car. It's not like every car is completely different... Things are not in different order or different locations. It should be the same with these [media] devices." (H1)

"Printing fotos from digicamera..." (H2)

"Cords..." (H3)

"Things should just work. I have no need for devices that do not work with others." (H3)

"With my laptop, I don't want to spent a lot of time just to get things ready so that I can do what I want. Like setting up connections and cables." (H9)

"Manuals for devices are written by completely own species of humans. Especially the translated manuals. They are not suitable for normal people." (H9)

"Recording TV programs is a huge mess..." (H4)

Easy access from anywhere

"I have so often this situation that I'd like to listen a CD or a mp3 song while e.g. at work and I only have the song at home, or in the car or... Media should allow for distributed access but not be dispersed in many locations." (H3)

"Some sort of one-stop solution; so that whatever you might carry with you would somehow interact with each other." (H3) (H7)

"So all the passive media, what you consume and also active media, like web, email etc... There would be equal possibilities to access all this media both mobile and locally" (H3) (H4)

"It should be possible to store everything (sound, pictures, text etc.) in one place...and store old things like vinyl records also..." (H9)

Interoperability

"Like...Where can I store my things? Should I use PC... could I network my devices together? ...Lot's of stuff is available, but regular person cannot take advantage of it" (H1)

"1-for-all remote control..." (H3)

"laptop, pc, mobile phone etc. would just work with each other... and share my music etc." (H7)

"... that mobile phone would work with my device(s) at home..." (H9)

Unique end user experience

"Instead of movie dumbed down for all, we could have this real sense of personally tailored service/media for you... Like you had in the story-books where you choose paths depending how you wanted the story to progress: if yes, go to page 32, if no go to page 50. (H7)

Service attitude: "Devices are made and media produced with the attitude of just getting lots of money out of consumers. And then there's the aim to cause addiction in the users... This does not serve people. It deprives them of time, money and free thought." (H1)

TV-fees payed according to need/use: "...I watch TV, but there are unnecessary programs... At least student discount should be available." (H2)

TV-program schedules: "The programs that I watch... should be shown earlier than in the late evening...It should be possible to serve the needs of the different viewers." (H2)

"I want **Culture-TV** [*switsy-TV*]. You would get good, quality news and current topic – reportages. And good fact/professional-discussion programs. But in addition to these, also other aspects of the culture, like quality drama movies, music and nature/culture reportages/programs. (H9) (H10)

The computers are not reliable / Faulty technology

“Programs... tilt” (H2)

“Intranet just doesn’t work sometimes...” (H2)

“floppies just break suddenly...” (H2)

“When I send an SMS (or email) with my phone I assume that it gets through. But then it doesn’t and my friend will be very angry to me, because she finds out later that she didn’t receive the important message. But I did everything I could!” (H7)

“I sometimes get this feeling of <twilight zone>. Days (events) might disappear from my (digital) calendar or something...” (H7)

“Technology does not work... or let’s say it does not work reliably for everybody...” (H1)

“Webpages don’t always work, a plugin might be missing or something” (H5)

Cheaper fees

“Internet-connections are too expensive” (H2), (H6), (H9)

“High-profile Hollywood movies are not worth the money. Maybe movies would be better with smaller budgets (and resulting to cheaper movie theater tickets)” (H7)

Easy to find anything

“I try to find a song; it might be on a computer, or on a CD, DVD... or I might have seen it in TV or read from a paper, so I don’t have it. How to find and get that song?” (H3)

“There should be a program guide, so that I can find all my stuff (i.e. media) and other stuff” (H9)

“I know there’s lot’s of interesting stuff in the world, but I can’t access it. For example TV documentaries in other countries.” (H4)

“I have this dream that whenever something is produced somewhere, I would be able to buy/get access to it.” (H4)

Organising

“I already have huge bags of videotapes... I am too lazy to label them all, but I would really like to store them, with nice indexes... and photographs too.” (H1)

“I don’t want to have huge piles of pictures in my computer. I can’t find anything from there.” (H4)

Recommendations

“There are communities and other groups with common intrests... So if I would say that this is a good thing, then that information can be communicated to others... such metadata. Then this would make it easier to find things that are interesting.” (H1) (H7)

My dream device

“Small, high quality, easy to use, stylish, ..., works with computers, fits to pocket...” (H6)

“One multipurpose device, stylish, I can watch TV, listen radio and do computer things with it. Doesn’t make my room look ugly. ...I would like to have it small, like small portable TV...” (H9)

“It should not be one specific device, but [a set of technologies] that allows me to have distributed access so that I can access all my stuff in one place.” (H3)

Peacefulness - Not always connected

“I feel that I’m in a hurry all the time, if I answer to the phone everywhere... while travelling, off-work etc. People should not wonder if I don’t always answer the phone” (H2)

“In some situations, it would be great to be always-on without needing to carry monstrous laptop and wlan with you. But it should exist only when you definitely need it, so it could be called *almost-always-on*.” (H3)

***** *the topics below were discussed by 1-2 persons* *****

Too many passwords

“All the passwords are too much. It’s too hard to remember them all...” (H5)

Copyrights

“...it’s of course sensible to have control [on copyrights]..., but then there are these juridical hegemonies that concentrate on laws so much that people’s living begins to be impossible; all the time something is breaking some law even when living a normal life.” (H1)

“... it can’t be that consumers have to read thousands of pages of legal documents... after that they would be so scared they would do anything [with digital media]...” (H1)

“It was so simple in the 80s with cassettes. You could use it and make copies. Nowadays everything is so complicated. Things should be easy again.” (H4)

Conservative corporate culture

“There is no desire to change, there is a fear of losing one’s position [in the market]” (H1)

“[The fear that] the fast pace of technology and the new potentials lessen the appeal and market share of the traditional large stakeholders...” (H1)

“So this fear is slowing things down” (H1)

Technical standards

“There is no nice consensus, the same goal... There’s lots of different companies and organisations that drive their own standards... and thus the development is not nicely linear and rational...” (H1)

“Many of my friends bought Minidisk when it was released and spent a lot of time to transfer their music to it and index it. Then a few months or a year later they had to abandon it, because it didn’t do all that they wanted. It didn’t work with other technologies.”

Informing consumers

“There should be... let’s say consumer information on digi-tv [like FAQs]” (H1)

Lack of trust

“There is more and more content and how can I know if the things that are said are true? For example, if a net newspaper speaks the truth?” (H7)

Fear for lack of security

“I get sometimes messages that virus has been found... But I don’t know what I should do with that kind of message...” (H2)

“Like, if I write an opinion, let’s say to a learning environment, how can I know some police/Echelon-system won’t look it up and say I’m a terrorist?” (H7)

Delays and waiting is annoying

“Internet-connections are too slow. Also, it’s frustrating when I have to wait some program to load” (H5)

Longer-lasting devices

“old landline phones do not easily break like the new mobile phones” (H2)

Guarding / Parental control

“Children’s use and access to internet and games should be controlled. Also criminals can form networks in internet and find material for their crimes.” (H2)

Too much information and attention seekers

“The problem with media is that there’s too much of it, and everywhere. There should be ways for people to sort it all out...” (H7)

“I should have this speed-reading ability so that I could go through all the important material that I have...” (H7)

“how could I have the ability to see/find the essential things?” (H7)

Accelerating pace of life

“We have this culture of hurry. That is, time is money and consequently there is no time to think and ponder things... in the Middle Ages one would write a letter and it would take four weeks to be received. There was lots of time to read and re-read the previous letters before the next would come...” (H7)

Quality study content

“It should be possible to study, for example university courses, for free, or for very small fee. Finnish open university is has so expensive courses. There should be this study content available that I could use. It would benefit everyone if also older people could study and/or just seek interesting information and skills, instead of playing Bingo everyday.” (H9)

Old people’s difficulties with computers

“It’s hard for old people to start using computers. And nowadays for example banks assume that you must use net to pay your bills. They are even reducing the self-paying terminals. And now old people, who do not have computer, should go to library, learn to use computers and pay the bills in the net. It becomes so complicated.” (H9)