Singing Together!

Co-Experience and Streaming Mobile Video

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Abstract

This paper presents evidence from a pilot study of how ordinary people use mobile streaming video. We argue that although such technology is still its infancy, it is important to understand how it supports social activities. In essence, our study shows how services that promote co-experience – for example, singing karaoke together with friends in public places – become attractive to users. We find that the collaborative use of streaming mobile video is often connected to having fun. The results indicate that user innovations are at the bottom of the social shaping of mobile multimedia technology. The data for this study are derived from a technology pilot of Radiolinja from 2002.

1. Introduction

Mobile telephony seems to be developing in the direction of service use. Third-generation mobile telephony (3G) is specifically defined as the use of multimedia-enhanced services over high bandwidth networks (UMTS Forum 2003). Such services can be roughly categorized into communication services (SMS, MMS and electronic mail) and value-added services (see Kalakota and Robinson 2002; Keen and Mackintosh 2001; Zhang 2003). So far, communication services have succeeded better in attracting users than value-added services. In communication, users are expected to respond to the messages they receive: communication is a two-way phenomenon. This is not the case with value-added services, even though their delivery is typically initiated through transactions. The challenge now is to attract users to value-added services.

Video streaming to mobile phones is one example of advanced multimedia services. Because video telephony has not yet been launched on a large scale, video streaming is typically used for showing professional, readymade media originating from a server. In Finland it became technically feasible to watch streaming video on a mobile phone during the latter part of 2002. Our study takes a user's perspective to see how watching of mobile video can be meaningful to users. At the same time, we search for possible user innovations (Repo et al. 2003; Repo et al. 2004).

2. Co-Experiencing Technology and Mobile Video Streaming

There is an emerging body of evidence for the view that the success of mobile phones is largely dependent on user-generated rather than professional content (games: Mäkelä and Battarbee 1999; SMS: Kasesniemi 2003; mobile images: Koskinen et al. 2002; MMS: Daisuke and Ito 2003; Koskinen 2003; Battarbee and Koskinen 2004).

This is where the real challenge lies. The fact that videos are professionally produced consequently reduces people to users (or more concretely, to viewing and hearing consumers). The few possibilities that remain for users' creativity are concerned with use and context, not content. Boredom with content, thus, easily becomes a problem (see Csikszentmihalyi 2000).

While users cannot touch the content of video streaming, joint and inventive uses are still possible. Streamed video supports a variety of activities, some of which are fun as such.[1] There is a world of difference between watching a movie from the small screen of a mobile phone and watching one's favorite karaoke song. In the former case, the point of watching is attention to detail; in the latter, in having fun and being together.

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[1] Mobile phones are surprisingly social objects. They can be shared (Weilenmann and Larsson 2001; Kasesniemi 2003), and the speaker feature makes conferencing possible. Also, MMS messages often require extensive planning and even staging action for the camera (see Koskinen & Kurvinen 2002; Koskinen et al. 2002).

Experiencing things together lifts the situation out of the realm of ordinary experience into *an* experience – something that stands out as a reportable and memorable issue (Forlizzi and Ford 2000). In social terms, this quality can be referred as "co-experience", in which the meanings of individual experiences are transformed in social interaction (Battarbee and Koskinen 2004). This observation suggests a possible hypothesis for a key success factor for streaming video: if it brings people together so that they share the experience of seeing and listening to the video, its chances for success increase. Thus, videos that support co-experience are assumed to best survive the test of users.

On the other hand, such encounter may disturb people who expect to be able to take care of their business without intrusion from others (Goffman 1961: 83-88). Correspondingly, one of two things happens. First, people involved in an activity fit their doings to this requirement by being discreet, keeping their voice down, and so forth. Or second, for a number of reasons ranging from bragging to politically motivated ridicule, they may take advantage of this expectation for privacy by embarrassing and disturbing others.

3. Streaming Mobile Video Service

This paper is based on a field trial on streaming video to mobile phones, carried out in Helsinki at the end of 2002. Mobile phones suitable for viewing videos were handed to 13 persons of different ages, gender and backgrounds. They were encouraged to watch videos in various different situations and asked to report their experiences in a diary. Technically the trial was carried out with Nokia 7650 running the Symbian operating system, RealOne

Player and video streaming over a GPRS connection at 22 kbps. (More details in Repo et al.

2003).

Users were asked to watch the videos available at Elisa.TV, a mobile portal for streaming

videos (wap.elisa.net/elisatv). The supply comprised 46 readymade videos in which

entertainment and karaoke accounted for the majority. The trial setting was not set up for

the purpose of our study.

Elisa-TV	ElisaTV – Entertainment
Welcome to ElisaTV's mobile pages. To view the clips, you need a Nokia 7650 phone and a GPRS connection. The phone has to have …	Experience, children Experience, Iiro ((a magician)) Finnish Championships in Body Building Experience, Mika Salo ((Formula 1 driver)) Smack Down 2002 Helsinki ((show wrestling)) Dress party at the University of Art and Design Experience, Finntelligens ((rap group)) Experience, Transworld ((snowboarding))

Illustration 1. Screenshots of the video portal and streamed video. Left: cover page with

instructions, center: subpage menu with links (entertainment), right: streamed video.

"Experience" refers to the "Hyppönen Enbuske Experience" television talk show and its

respective guest.

The design of the Elisa.TV mobile video portal at the time of the study is shown in Illustration 1. The cover page includes information on how to watch the videos. To watch, the user needs a smart phone, GPRS-connection (General Packet Radio Service) and the installation of RealOne mobile player. Most of the entertainment videos were outtakes from the television talk show "Hyppönen Enbuske Experience". In the illustration, Finnish pop star Jonna Kosonen is appearing on the talk show.

After browsing to the Elisa.TV mobile video portal, the user gets to choose between the types of video he or she wishes to watch. By clicking the appropriate link, the user is transferred to the menu page. Finally, by clicking the appropriate video link, the requested video is shown in RealOne Player on the mobile phone.

For certain purposes, streamed video is technically superior to MMS. In video streaming, the phone simply shows that part of the video that is currently being transmitted. This means that the length of the streamed video can, in principle, be infinite. Many of the videos in the study were over 7 minutes long, while the maximum length of MMS video files is only 10-15 seconds. On the other hand, streamed videos cannot be saved nor can they be forwarded.

4. Limited Content – and Boredom

Users were initially well motivated to the study. They considered the advanced mobile phone and the novel service truly interesting. At first the videos seemed interesting as well. However, the majority of users had already grown tired of watching videos by the end of

the first day – the rest became bored during the second day. Watching videos on a mobile

phone was in itself not enough to keep up user interest for long (Diary quotes 1-2).

1	When I received the phone I watched a couple of video clips right
2	away – it was exciting to see live images on the phone and hear speech.
3	After viewing a few videos I was a bit disappointed because they turned
4	out to be rather boring. At first a duration of only a couple of
5	minutes seemed quite short, but watching videos on that tiny screen
6	made the time seem long.

Diary quote 1. Woman, 40-49 years

1	I ran out of videos immediately – there were too few of them. In
2	the beginning it was sort of fun, but the videos were so bad that
3	I didn't bother for long.

Diary quote 2. Man, 30-39 years

The quotations show that growing bored so fast was partly, but not wholly, a question of

poor technical functionality or bad service quality. Although users did criticize the poor

sound of the phone, they were relatively content with its picture quality. In any case, they

had not attached great expectations for the quality of the service. It was considered a

prototype, which it indeed was in many respects.

A more serious problem arose once the entire content had been browsed through – there

was nothing more to see. Even though there were many videos altogether and they were

fairly long, their content was limited: the supply comprised very few types of videos and few examples of each type. Boredom was bound to creep in. The reason for this cited most often in the interviews and diaries was the limited content of the supply. This alone does not yet tell us much. Besides, users had grown tired of watching well before they had even seen all of the videos. Therefore, boredom need not be due merely to the narrow selection of videos.

5. Having Fun Together: Karaoke on the Mobile Phone

There was one notable exception to the general rule. Contents that were easy to view *with others* remained appealing all along, up till the end of the trial. This was the case with cartoons for children, but also with karaoke for adults. When there were people around to share a content, mobile video became entertaining. The device and its content supported co-experience. Singing karaoke together was something that excited all types of users. (Illustration 2).

Illustration 2. Singing karaoke on the subway

The diaries prove that users had found the karaoke to be fun. In Diary quote 3, the use of the video had been prompted by what the writer had overheard from other people's conversation. The quote describes how the device became a center of attention for "mommies" rehearsing singing a popular Finnish hit song. More importantly, it tells about delight (line 4) and excitement (5-6). This is co-experience enabled *par excellence* by mobile streaming video.

1	I was fiddling with my phone when I heard one of the mothers say
2	she was going to a party in the evening where they were going to have
3	karaoke. It hit me that she could practice beforehand on my phone! I put
4	the Juankoski piece on – and weren't the mommies delighted! When
5	Juankoski was finished I put on Jari Sillanpää, and it just got better
6	and better. Everyone was really excited!

Diary quote 3. Woman, 40-49 years

There is indeed a difference between collaborative and solitary use of streamed mobile video. The same videos are viewed in different contexts depending on the social nature of watching. Collaborative watching is a way of having fun; solitary watching is more a way of avoiding boredom. Watching cartoons with children was a similar hit in functional terms as karaoke. In one citation, a woman tells about following a boys' game. Another mother had brought her little daughter with her to the game. The girl was growing impatient, and as she got increasingly restless, "it dawned on me: why not let her watch animated films while

the boys were playing? I showed the first video on the list of cartoons and she was really happy – and the mothers, too, were all excited" (Diary quote, Woman 40-49 years).

6. Civil Inattention and Revolutionary Categories

Karaoke, of course, is not just about having fun – it is held in check by a set of restricting processes set by the environing social organization. Even though karaoke as such may be lots of fun, it may disturb other people around the singers.

The paradox is this: in public places, people exercise "civil inattention" – that is, they pay enough attention to others to show that they have acknowledged them, but quickly withdraw their attention away to let them go on with their own affairs (Goffman 1963:83-88). However, the excitement prompted by singing is at odds with this order. People who get overly excited may behave "situationally inappropriately". Bystanders may feel disturbed or humiliated and take remedial action. This kind of "drift" away from the proper footing (Goffman 1963:174-175) is a problem that has to be managed.

Illustration 2 above pictures two women singing karaoke on the subway. At the same time, three things were happening in their immediate vicinity. A middle-aged lady sitting behind the singers disapproved conspicuously. Her facial expressions and her body language clearly indicated that karaoke singing was not appropriate in a public vehicle. However, she was constrained by the situation and did not voice her disapproval. A teenager sitting in the same compartment with the singers shielded himself from them with a newspaper, signaling to outsiders that he was not a part of the group. Two pre-teen boys, however,

grew interested. They joined the singers to see the device and find out about the service, and marveled at the novelty in a loud voice. (Field note by Petteri Repo).

Again, there was one important exception to the rule. The following diary excerpt by a teenager reports on singing karaoke in the school cafeteria with her friends. (Diary quote 4).

1	We watched karaoke today in the school cafeteria. It was fun, all of us
2	at the table singing together. The other diners looked at us with
3	an expression of "good grief!" on their faces – but we didn't let that
4	bother us.

Diary quote 4. Woman, under 20 years

What happened in this case differs considerably from the scene in the subway. First of all, a high-school cafeteria is not a public place in the ordinary sense because it is dominated by members of the same age group, teenagers. Secondly, profanity is allowed to a much greater extent for teens, just as for children, than for adults. Behaviors that break the ordinary course of affairs tend to arouse disapproval and embarrassment in the environment. Yet, even though such behavior may be frowned upon, it may also be taken as a sign of success, as suggested by the quote (lines 2-4). Thirdly, teenagers may interpret any expression of irritation, embarrassment or even disapproval by outsiders as evidence of having established at least a momentary "revolutionary" feeling – if not identity. This gives them an impetus to continue the activity and impose their order over competing courses of action available in their situation (for "revolutionary categories" among teenagers, see Sacks 1994, I172-174, 399-402).

7. Conclusions

We have here presented evidence from a pilot study on how ordinary people use mobile streaming video. In essence, we argue that although this kind of technology continues to be its infancy, it is important to understand its social dimension. Services that support co-experience – like singing karaoke together with friends in public places – was seen to outlive the boredom inherent in professionally produced content for mobile multimedia. Our results also showed that the collaborative use of streaming mobile video was most often connected to having fun (which was our focus in this paper). The social processes at work behind this particular aspect of the technology are not well known: we have only just begun to unravel them. In nay case, it seems evident that user innovations are at the bottom of the social shaping of mobile multimedia technology.

Our data are obviously limited and are drawn from one of the first technology experiments in this area. This brings along all the pitfalls of such an experiment: limited content instead of the endless offerings of www, technological problems, terminals designed for mobile phones rather than for viewing video images, and so on. Nevertheless, we feel that our key finding can be of use in designing attractive mobile services. Indeed, mobile multimedia challenges the solitary nature that has traditionally been attributed to the mobile phone. Karaoke is a good example of a well-functioning content for streaming video. Those who sing karaoke are accustomed to singing to an audience, and so are not afraid of public embarrassment. And furthermore, there is always the appealing element of showing streaming media to a friend.

The collaborative use of mobile phones and services is by no means a new phenomenon. Studies of teenagers, for example, report on the enjoyment of reading received text messages (SMS) together (Kasesniemi 2003). The mobile phone is perhaps transforming its character from being a more or less personal communication tool to becoming a shared multimedia device – much as suggested by early evidence on mobile phones (Weilenmann and Larsson 2001).

Of course, as our study suggests, it will take a number of years before streaming video will become a commercial success. Most consumers do not have phones with the appropriate technology to watch mobile video and it is questionable whether the upgrades they purchase support streaming media. Nevertheless, we encourage businesses to experiment with services of collaborative nature, as they appear to offer opportunities to markets that do not merely add convenience to the contemporary use of a service but actually extend the limits of possible services (Keen & Mackintosh 2001).

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