Maintaining the Instant Connection – Social Media Practices of Smartphone Users

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Abstract. In the last few years, using social media via mobile phone applications has become increasingly common. However, there are only few studies exploring people's mobile application usage behavior. In order to understand users' mobile social media practices in the context of everyday life, 30 owners of high-end smartphones were interviewed for this study. The context of their mobile SNS use cases was studied through diaries kept by 15 of the participants. The results show that mobile social networking is typically about briefly checking the latest updates and news, most often while in transit and when immersive use of the internet is not possible. Also, there are more browsing activities on the mobile phone than content creation, which is better done with PC. In the use of social media, immediate access to the most interesting content, such as photos, status updates and news, is highly valued; in this respect, the mobile phone adds value to the use of social media by enabling access to it in a great variety of situations and locations. As a practical result, we present design implications for mobile SNS applications and point out that there is currently a lack of features for effective selection, storing and filtering of content produced through the various social media sites.

1 Introduction

With the greater prevalence of smartphones containing internet access and social media applications, the mobile internet, i.e. accessing internet via a mobile device, has emerged as a common way to browse social media alongside the stationary web. Today, social media is increasingly consumed and content is created using mobile devices, and there is a plethora of mobile applications and services designed specifically to enable mobile phone users to update, browse and create content. Mobile phones have changed people's communication practices, as they allow us to remain connected to others irrespective of location. For the most part, research carried out in the area so far has explored phone calls and SMS as forms of mobile communication, with the more recent phenomenon of mobile social networking remaining a relatively unexplored research topic.

This study presents the results of a user study with 30 qualitative interviews, and aims to understand the participants' mobile social media consumption practices. The participants were owners of high-end smartphones and consumed various social media sites and SNSs through their mobile phones regularly. The aim of the study was to understand the role that mobility plays in social media consumption, and to

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explore how the physical and social contexts of the use affect the selection of the device and the content that is consumed. Furthermore, in this chapter we describe the situations in which social media is typically consumed in order to identify the patterns of mobile social media use. By exploring the social media practices of the participants, we aim to find out whether the mobile device is bringing any additional value to the use of social media compared to the PC and to identify any typical patterns for sharing and browsing social media content through mobile phone applications.

This study focuses on owners of high-end smartphones who have the opportunity download a variety of existing mobile applications for their phones. We assume that because the latest mobile applications for the most common SNS are relatively simple to use, easy to open and usually enable instant access to the site, they are facilitating the overall use of social media.

2 Related Work

In recent years, social network sites (SNS), such as Facebook, Twitter and MySpace, have integrated into people's daily communication practices. boyd & Ellison [1] define SNSs as web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system. A feature common to all forms of social media is that they enable users to communicate, create, share and view digital content of interest, and to reciprocally give and receive support and information.

So far, research on social media has not widely discussed the characteristics of its use via mobile devices, making it interesting to discover whether there is some extra value that mobility can add to it. There are many characteristics associated with the mobile device that separate it from the stationary internet. A mobile phone is usually personal, whereas a PC is often shared with others; for this reason, the mobile phone is generally considered a more intimate medium [3,9]. A mobile internet connection is fast and easy to use, as it is almost always available and enables quick access almost anywhere and anytime. Consequently checking behavior, i.e. brief usage sessions repeated over time, comprises a large part of smartphone use [11].

In a survey reported by Kaikkonen [8], the mobile internet users mostly read email and followed some social media sites, such as blogs and discussion forums. However, active contribution to social websites was less common when using mobile devices compared to desktop computers. According to the participants, this was due to mobile web sessions being shorter and more prone to interruptions, which meant that the desktop computer was perceived as more appropriate in situations that required peace and privacy [8]. Cui and Roto [4] introduce a habit of using the mobile internet during micro breaks that can take place anywhere. The activities engaged in during these micro breaks mainly consisted of checking updates. The duration of the micro breaks can be very brief, and the attention span of the user may be as short as four seconds. In their large scale study of the usage of mobile applications, Böhmer et al. [2] found that application usage is at its highest in the afternoon and evening, peaking around 6

pm, with the average usage time being less than a minute, and that social applications are most likely to be used in late evening from 9 pm to 1 am.

Recently, many social media services and applications have been developed for use via mobile devices; social media services such as Foursquare in particular are bridging the gap between online and offline, as they support users' association with physical locations [10]. With GPS-enabled phones, people are able to employ location-based social media services, making the boundaries between online and offline even more blurred.

Based on previous research [7,14], it seems that some forms of social media are better suited for mobile use than others. Particularly microblogging, a form of blogging enabling brief updates usually limited to 140 characters, is commonly done via mobile phone: for example, the majority of Twitter users engage with the site using multiple devices [14]. The fascination with microblogging lies in momentary and brief postings on experiences that would not be shared via other, familiar channels and achieving a presence, a sense of being "out there" with friends, by checking each other's updates [5]. We assume that a mobile device is particularly suitable for creating brief postings at a specific moment in time and encourages sharing them instantly and spontaneously.

Until recently, the use of the mobile internet has been somewhat limited by technical issues and had thus been considered as narrower in terms of the user experience. Previous research [8,9,13] has pointed out that users of the mobile internet have experienced difficulties in understanding the structure and layout of websites viewed through the mobile phone; also, the first internet services for mobile phones were based on tailored content and therefore offered only limited content compared with full internet [8,9]. Hinman et al. [6] compared mobile internet use with PC use and found that users wanted to do the same things with the mobile device as they were used to doing with a desktop computer, but felt it was not possible, as internet browsing on the PC is immersive and invites exploration and discovery, whereas when browsing the web via a mobile device the attention is divided and it is difficult to get totally immersed.

However, previous research on mobile internet use [4] has found that even though the mobile is used most often in stationary situations with no internet access, it was surprisingly also opted for in locations providing internet access due to being perceived as a more convenient means to use the internet in certain situations, such as when watching television at home. Böhmer et al. [2] noticed that the choice of browser over application was to some extent dependent on location or activity to be performed on the internet: for example, checking flight status at the airport was more likely to be done using a browser than an application, probably due to the inadequacies of native applications.

As the popularity and variety of social media sites has increased rapidly during the last couple of years, we assume that social media consumption currently plays a major role in mobile web browsing. Due to previous limitations in mobile browsers, mobile versions were produced of the social media web solutions, with the identical full web sites becoming available only after sufficient development of mobile devices [8,9]. As the selection of mobile applications available to consumers has grown rapidly during the past few years, it seems that social media is now being used increasingly via mobile applications tailored for specific websites, and less with a mobile browser.

3 Data Collection

3.1 Participants

The research data consists of 30 qualitative user interviews that were collected in Finland in two phases; the first phase in September-October 2010 and the latter in January-February 2011. The participants were recruited through mailing lists and discussion forums intended for various student and hobby groups, one of which was aimed at the fans of Apple products. A total of 51 persons enrolled for the study and filled in an online screening questionnaire containing questions about their background on topics such as age, occupation, current mobile phone model, and how often they used social media through a PC and a mobile device.

Based on the screening, a total of 30 participants were selected on the basis of their current mobile phone model and the amount of social media usage through the mobile. Out of the participants, 10 were female and 20 male, with ages ranging from 17 to 56 (average age 29). The majority of them (16) were students, and the rest worked full-time: 7 in field of ICT and 7 in non-ICT occupations. Their mobile devices were: iPhone (11), Nokia N900 (5), HTC (4), Nokia XprssMusic (2), Nokia E71 (2), Google Nexus One (1), some other Nokia smartphone (5), Sony Ericsson Xperia (1) and Samsung Galaxy S (1). In addition, two participants mentioned using iPad and two iPod Touch to browse social media. Six of the participants reported using more than one device for mobile web browsing.

Table 1. Most popular social media sites among participants (N=30).

Social Media Site	Mentions
Facebook	29
YouTube	25
Online discussion forums	22
Twitter	10
MySpace	7
Flickr	4
LinkedIn	4

The group of participants consists of high-end mobile phone owners, who presumably had fixed rate access to mobile internet. As the participants were selected partly based on their ownership of the most recent and most advanced smartphone models, the group of participants can be defined as early adopters of technology. Previous literature [11] on the social shaping of technology suggests that early adopters tend to be social leaders, as their understanding and use of technology may influence others.

In the screening survey, the persons who had enrolled for the study were asked how often they used social media sites through a mobile device. As participants to the study were selected based on their activity, they were more familiar with social media sites than the average population. Out of the group of the participants (30), 13 (43%) reported browsing social media with a mobile phone more than five times a day, with

ten participants (33%) citing a frequency of one to four times a day. The rest (7) used a mobile device to browse social media weekly.

3.2 Method

We used a semi-structured interview method for investigating the informants' social media browsing and content sharing practices. The main themes of the interviews were: motivations for using social media services, description of the context of use, content creation and sharing, and routines and patterns of mobile social media use.

The duration of face-to-face interviews varied from one to two hours. In the interviews, the informants were asked to show on their mobile phone the social media applications most commonly used by them. The interviews were recorded in audio and transcribed in order to conduct a qualitative content analysis. All the interviewees were rewarded for their participation with a EUR 20 gift voucher.

In order to gain more detailed information on the context and situations of mobile use, 15 of the participants were asked to keep diaries of all their mobile social media usage during two days of their choice. In the diaries, they were advised to write down each time they used social media and to describe in detail the situation and duration of use, what they did and if any problems occurred and, especially, if the context of use affected on the use of social media in some way. In total, we obtained descriptions of 125 use situations. The diaries were written down on a form provided by the research group and submitted via e-mail before the face-to-face interview. The diaries were then thoroughly discussed in the interviews.

4 Results

4.1 Social media use cases

The diaries were analyzed in order to understand the context of mobile social media use and to identify the daily routines and recurring practices of the users as well as the more exceptional and extraordinary situations of use. The participants were asked to estimate the duration of each of their social media sessions carried out via mobile, which provided us with the durations of a total of 122 use cases (see figure 1). The results show that the participants' social media use consisted of brief recurrent sessions, as the majority of sessions lasted only from one to five minutes (60%). The longest session mentioned in the diaries lasted approximately 70 minutes, the shortest being only few seconds in duration.

Fig 1: Duration of social media use sessions (total=122)
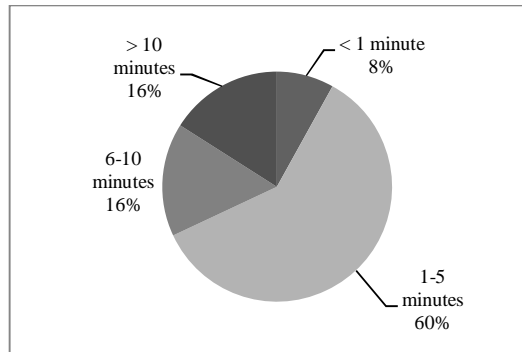
As shown in table 2, the number of occasions of browsing content (97) was more than three times greater than the number of sessions involving content creation (23), which indicates that mobile social media use is primarily about reading and browsing content, and less about content creation and sharing.

In the interviews, the participants were asked why they did not create and share content with their mobile device, which elicited several mentions of problems regarding the usability of devices. The most commonly cited reason for not creating content on the mobile phone was difficulty in text input: typing with a small virtual touch-screen keyboard was slow and errors were easily made. Particularly when traveling in a shaky bus or car, the conditions were too unstable for typing longer texts. Many of the discussion forums popular among the participants currently lack suitable mobile applications. Therefore, writing messages on forums was considered too time-consuming. Difficulty in sharing links with a mobile phone was also mentioned as one reason for not posting on SNSs. Especially users with phones other than the iPhone stated that difficulties in photo uploading caused them to prefer uploading them from PC.

Table 2. Social media content browsed (total=97) and created with mobile phone (total=26)

Social media content browsed (total=97)	
Reading status updates, newsfeed, latest comments on Facebook	41
Reading private messages	16
Reading discussion forum messages	13
Reading e-mail messages	11
Browsing a friend's profile on SNS	6
Listening to music/viewing a video on SNS	5
Browsing pictures uploaded to SNS	3
Reading Twitter feed	2

Social media content created (total=26)	
Commenting on something	9
Composing private messages	6
Writing status updates	6
Liking something	3
Voting/rating	2

4.2 Daily routines of mobile social media use

With the diaries, we wanted to understand the daily social media routines of the participants and how the mobile phone is integrated into them. The situations of reported social media use via mobile are listed in table 3.

Table 3. The situations of use mentioned in diaries

Situations	Mentions
At home:	*44*
In bed (morning and night)	16
Watching TV on a sofa	6
During a break (coffee, tea, food)	5
Other	17
Outside the home:	*44*
At work, school or lecture	13
When walking to school, work, etc.	11
In a shop, city centre	10
When visiting someone	5
Other	5
On transportation:	*37*
Bus	19
Train	13
Car	5

At home. Contrary to the assumption that the mobile device is most often opted for in situations where stationary internet is not available, a common context for mobile social media use seems to be at home. Based on both the diaries and the interviews, the most common use case for browsing social media with the mobile phone was at home while in bed. The mobile phone is usually positioned by the bed and enables quick and easy access to the internet before going to sleep at night. The participants also wanted to see the latest news and updates as first thing before getting up in the morning and opening the PC. The mobile was also considered a discreet device, as you can browse it in the dark without disturbing others, in contrast to having to turn on the light to read a book, for example.

"The first thing in the morning is to check Facebook with my mobile from bed." (male 27 years)

"Before going to sleep I read the different forums and Facebook with the mobile. That way I don't have to turn on the computer." (Female 38 years)

At home, the mobile phone is always at hand, and the participants reported that in situations where they wanted to have a quick look in social media during a commercial break on TV, or in the middle of other activities, they preferred to browse it with their mobile rather than bother going on the stationary computer, which is often located in another room. There were also mentions of situations where the PC is being used by another person or there is some other software, such as a game, running on it.

"I don't want to walk to the computer when I'm lying comfortably on the couch." (female, 25 years)

"I don't want to close the game on the PC when I am taking a break." (male, 26 years)

At work and in school. Social media is used in the workplace and at school during the day. Those who have stationary internet and work with a PC used the PC as their primary social media device. However, there were many exceptions, as the use of SNSs is not in allowed in all companies. The diaries and interviews contained numerous mentions of social media use during lunch or coffee breaks, or checking with phone whenever possible, e.g. during boring meetings or lectures, between lectures, or when there are no customers nearby. As a device, the mobile was also considered discreet and unnoticeable, as it allows the user to browse personal content with more privacy.

"During a lecture, if you are sitting in the front row, you tend to go for the mobile so that your Facebook is not visible to everyone behind you." (female, 24 years)

In public places and on the move. As expected, the mobile internet is commonly used in situations where stationary internet is not available. Most common use cases mentioned were transitions from home to workplace or school, when traveling by bus, train, or car. The mobile phone was preferred to a book because it is easy to carry, open and put away in case the browsing session turns out to be a short one. Typically, the participants were engaging in short social media sessions whenever possible, even when walking and stopping at the traffic lights for a few seconds.

"When you are caught in a red light and you have to wait, you can take a quick look in Facebook." (female, 24 years)

The mobile device was often taken out and found useful in public locations around town, often as a result of an ad hoc need in a particular context; for example when shopping in a grocery store and looking for recipes in a discussion forum or a blog.

Another common use case mentioned was spending time in the city during lunch or coffee breaks.

Special and exceptional occasions. In addition to their daily routines and commonly occurring situations, the participants were asked about special and exceptional occasions regarding their mobile social media use. They reported about various special events such as traveling and visiting new places and meeting new people. Such situations prompted the users to be more active in their use of social media, particularly in terms of creating content and sharing it with others. Especially traveling in interesting places and experiencing new things were mentioned as occasions that were exceptional and therefore worth sharing with others:

"If I am attending a concert or a play, I can write about it immediately and recommend it to others." (male, 56 years)

Other exceptional use cases mentioned were situations in which the users needed to quickly check something while on the move, such as the address of the place they were going to, a phone number or details of an event they were about to attend.

Also social situations in which social media was used collectively with others, for example by sharing content with friends by showing them the mobile display, were mentioned as exceptional. Usually content was shared as links via SNS or e-mail, but there were a couple of mentions of social situations in which a funny video, picture or song was shared by showing the screen to others.

4.3 The value of mobility in the use of social media

"Because social media services are based on continuous presence, I'll check them every day. Checking them only once a week, you would miss lots of things." (male, 31 years)

In the interviews, the temporal aspects of social media usage were clearly highlighted; photos, events, news, and other content shared on social media should be read at the earliest opportunity, and are considered to be the most interesting immediately after they are posted. The mobile use cases mentioned most frequently in the diaries were short checks of the latest updates on the Facebook feed. Briefly checking their newsfeed several times a day enabled the users to catch information on the most recent events as soon as it was posted. All interviewees emphasized that reading the updates as soon as possible was important for them and if there was a long break from social media, especially Facebook, they felt that they might have missed something important going on in their network of friends. They also describe situations where, having been online at the right moment, they had been invited to a spontaneous get-together.

"My friend once invited everyone sledging, and then a bunch of us went sledging just like that. I check it regularly to find out if something special is going on." (female, 24 years)

Some participants described their frustration at having missed something important because they either had not checked social media regularly, or had otherwise failed to notice an important update.

"I did not have a clue that there had been a baby born in the family, because I didn't see it on Facebook. I felt like I had totally missed out on the happy news and I was only told about it three months later." (female, 31 years)

The results show that for the participants, social media had become an important part of their daily routines and practices. Social media was read first thing in the morning and before going to sleep at night. Social media was also used whenever the respondents had extra time or were bored, and the mobile device allowed them to pick up the latest news and updates in a greater variety of contexts and situations compared to the stationary web.

Social media was used when there was a lack of company, as well as in the presence of other people. However, there seemed to be a social norm against checking social media when accompanied by others. In such a context, the mobile phone was considered more inconspicuous than the PC and thus less rude. Other people's presence was also considered to be distracting, which also contributed to the suitability of the mobile phone for browsing the internet when accompanied by others, as browsing with a phone is a less immersive experience.

"I'll try not to use it if I have company, but if I'm bored or not participating in the discussion, I can take a quick look in Facebook or check the news." (male, 31 years)

Based on the interviews and diaries, it can be concluded that the value of mobile social media use lies in its' immediacy and independence of place and time: the mobile allows instant access to the essential content. Reaching for the mobile phone in your pocket and opening an application is easy and quick, and the device can also be switched off and put aside instantly if attention is to be focused on other things. Another advantage of the mobile phone is its private nature and the fact that it does not disturb others, or draw too much attention, but enables the creation of a private space and is therefore suitable for browsing personal content and communicating privately.

To our surprise, the mobile phone is used mostly for reading and not so much for content creation, even though it allows people to share their experiences and feelings instantly. Especially social media status updates were perceived as content that should be written and shared the moment they are experienced:

"Sometimes I have a thought in my mind that might be a good status update and I need to share it immediately. It would seem somehow false to post it three hours later." (female, 30 years)

4.4 Roles and functions of mobile and PC

Even though the participants of this study represented the most active group of mobile social media users, the majority of them still reported using PC as their main social media device. With the interviews, we wanted to understand their social media use as a whole, and to see the general view of how social media use is divided between mobile and stationary device; are there some tasks or services that are perceived as more suitable for PC, or is the selection of the tool mostly down to context?

The results show that mobile social media use is about quickly checking the latest updates and finding out if something interesting has occurred. If something specific comes up, the interesting content is often viewed later in more detail on the computer screen. In particular, users prefer to revisit content such as videos and photographs of good quality and long texts and articles on the PC when there is more time available and the content can be viewed from a large screen. The participants also reported that the current mobile SNS applications were lacking some important features, which made them want to return to some of the content using a PC:

"With the mobile, you are not able to see the quality of photos and mark them as favorites on Flickr." (male, 26 years)

"A mobile app is great for an overview, but it's like seeing thumbnails on the PC. You can't really see the details in the pictures on the mobile phone" (male, 29 years)

Even with the latest technology, the mobile web still seems to involve certain limitations regarding browsing and content sharing. The participants mentioned some usability problems that limited or reduced their use of the mobile internet, and thus led them to prefer using certain functions via PC only. Particularly text input of long text items, viewing photographs and videos, listening to music, reading long stories and articles and adding photographs and videos were considered as tasks better suited for PC.

In addition to technical and usability issues, also some context-related factors impacted the selection of browsing tool. In situations where the time available for reading or writing was particularly short, the users opted for the mobile device since it requires a lower level of engagement than the PC.

4.5 Design implications for mobile SNS applications

All participants preferred to use the most popular sites, such as Facebook, Twitter and YouTube, with native applications designed specifically for each site. The mobile browser was mostly used for browsing other websites than social media, such as reading the news. The applications were considered better than a browser because the connection was instant and did not require login every time and the essential features were clearly laid out. Especially Facebook applications were appreciated because they offered only the most relevant content without games, applications or advertisements, which the majority of respondents perceived as disruptive. Also, many of the

Facebook applications displayed the content of the newsfeed in a preview form, meaning that the users could easily take a quick glance at it and use the mobile browser for a closer look at items that appear interesting enough.

In the interviews, the participants were asked what kind of social media content they find the most interesting. According to the responses, the following four content categories were valued the most:

- Content that is related to me and where someone is paying attention to me specifically, e.g. personal messages.
- Content that people have produced themselves, e.g. personal photographs.
- Content that is new and fresh.
- The latest news distributed and commented on by friends.

Mobile applications should allow for a quick overview to the latest content and enable users to easily relocate the most important content items later on. Most SNS content, such as status updates, comments, likes and links from external sources, is browsed quickly and glanced at only once. The content that is considered the most personal and interesting in the long run is often returned to later on and read more carefully when the user has more time.

The participants reported that their current mobile applications for Facebook were suitable especially for browsing content to be quickly glanced over, such as newsfeeds, whereas content that required closer viewing, particularly photographs, was difficult to find. The users had to come up with their own ways of bookmarking interesting content by clicking on the like button or adding comments on Facebook in order to find their way back more easily.

Sharing content that was linked from external sources, such as news, videos and interesting articles, was common particularly on Facebook and Twitter plugins, and reading the content brought to SNS and recommended by friends was often considered more relevant than reading the content on the original site:

"I never read news on online news sites. I want to get recommendations and links from my friends on Facebook: that way, they have already filtered the content for me, and selected the most interesting pieces of information." (male, 27 years)

However, the amount of the data linked from other social media sites, such as Sportstracker, YouTube, Spotify or LastFM, was sometimes experienced as excessive, resulting in users wanting more control over what they share with others and avoiding automatic sharing through social media plugins such as Facebook connect, in order to avoid spamming. Particularly on Facebook, the amount of information received through the newsfeed was perceived as too great, and as a result almost all of the participants reported having filtered content by blocking unwanted applications, games and people. Types of content most often filtered out included uninteresting people or persons who post too much, useless applications and games, commercial content from Facebook pages liked by the users, and location-based content that is currently non-relevant:

"If you're abroad, it's annoying when your hometown sends daily updates and messages about events there." (female, 25 years)

All participants mentioned having hidden people not so interesting or close to them from their newsfeed at least temporarily. Yet, completely blocking out certain SNS friends was not common, because even people not considered to be very close or personally important to the users were thought to sometimes write interesting updates. In order to maintain an element of surprise, the users did not want to filter out too much of the content and continued to also retain some more peripheral people in their networks.

The most preferable way to filter social media content was to arrange it according to people. On Facebook, this can be done by grouping people into the different categories according to importance, relationship type or real-life group they belong to using the Groups feature. However, the most used features for filtering were lacking from the mobile applications, and the adjustments had to be made with the PC browser. When asked how they would feel about automatic filtering of content, the participants did not consider it reliable enough: they were suspicious of whether the system would really be able to detect what is relevant for them personally and felt it might cause them to miss some interesting content. Also, the participants emphasized that urgency, personal relevance and the need to react or respond varies greatly depending on the type of content. The status updates of friends were considered interesting but usually non-urgent, and could thus also be read later. Private messages were mentioned as important and requiring immediate attention, whereas postings and pictures related to the user were perceived as the most interesting though non-urgent content category.

The participants expressed a need to receive immediate notifications of the most important and urgent content. Most of the social media applications used push-notifications for the latest SNS activities. However, more customizing was needed for separating the most important content, such as personal messages, from the news stream. Voice feedback was perceived as useful only for the most important news, as the notifications were deemed annoying if they appeared on the screen too many times of times per day.

The participants who used many social media services regularly expressed a wish to manage all their social media content, including discussion forums and blogs, using the same application. Currently, they were able to combine the accounts for the most popular sites such as Twitter and Facebook, but since the personal relevance of social media feed varies between the different services, they did not wish to read all content merged into the same newsfeed: for example, updates from Twitter, LinkedIn or YouTube contacts did not have the same personal value as those posted by Facebook friends.

The relevance of personal e-mail was estimated at the same level with SNS feed, and the idea of combining the two in the same application was positively received, even though many participants said that messaging through Facebook, chat or IRC had replaced e-mailing between friends. However, there was no interest among the participants for combining their work e-mail account with social media updates: in their free time, they try to remain up-to-date with their SNS feed on an instant basis, but did not want to receive their work e-mail in real time, finding it could wait until the next work day.

5   Conclusion

Our results show that the importance of using social media via a mobile device lies in being able to check the latest news and staying in perpetual contact with others. The immediate contact with people in one's social networks enables instant reaction and participation. The mobile phone allows checking the latest news and social media updates briefly in situations when more immersed and extensive browsing is not possible, such as in transit, at work or at school. Still, mobile applications were also used at home when stationary internet was available, as simply reaching for the phone was considered convenient and easy when there was no need to perform lengthy or immersive tasks.

The results show that most often social media was browsed when people were bored or just wanted to keep up with latest updates by their friends. Even though the mobile phone can be used instantly in a moment of need and allows synchronous communication and sharing content in real-time, it still lacks many of the features and elements of the full web, and the browsing experience remains narrower than with PC. The mobile is not perceived as engaging as the stationary web in terms of time spent on each session. This assumption is supported by our findings, as the diaries contained only a couple of mentions of browsing sessions lasting longer than 30 minutes. Due to the instant connection, the mobile phone is used for social media browsing more frequently than the stationary web, which is often kept open in the background and opted for in tasks better accomplished via the PC.

On the basis of the results, we can say that ownership of a high-end smartphone with specifically tailored social media applications seems to encourage and motivate people to use social media in various contexts and thus increase the overall use. Even though all the participants mentioned the PC as their main social media tool, they felt that mobility adds value to the use of social network sites since it allows instant and more frequent use of SNS.

Regarding the design of SNS applications, the participants felt that reading the latest news on their feed is currently easy but that there is a lack of features for storing and bookmarking the most important content items for later use. As a result, this was done most commonly via PC. The number of social media updates was also often perceived as too great, and uninteresting content should be filtered out more effectively. The most commonly used filters were not available on mobile applications, which led to filtering adjustments being made with a PC browser. In addition, the participants' opinions of the type of content that should be filtered out varied to some extent. Also, they did not find automatic filtering reliable enough and wanted to be able to decide for themselves what kind of updates and news they wanted to receive, in order to maintain an element of surprise.

The social media site usage by the participants of our sampling follow the popularity of social media sites among Finns in general, with Facebook as clearly the most popular social media site and Twitter being used by less than half of the participants. Thus, the affordances of Facebook and reasons for using it seem to impact our results to some extent.

References

1. boyd, d. m., Ellison, N.B.: Social network sites: Definition, history, and scholarship. Journal of computer-mediated communication, 13(1), article 11 (2007)
2. Böhmer, M, Hecht, B., Schöning, J., Krüger, A., Bauer, G.: Falling asleep with Angry Birds, Facebook and Kindle – A large scale study on mobile application usage. In the 13th International Conference on Human Computer Interaction with Mobile Devices and Services (MobileHCI 2011). ACM, New York, NY, USA, pp. 47-56 (2011)
3. Chae, M., Kim, J.: What's so different about the mobile Internet? Communications of ACM 46, 12 (Dec. 2003), pp. 240-247 (2003)
4. Cui, Y., Roto, V.: How people used the web on mobile devices, In the 17th international conference on World Wide Web (WWW '08). Beijing, China, pp. 905-914 (2008)
5. Grace, J.H., Zhao, D, boyd, d.: Microblogging: What and How Can We Learn From It? In CHI '10 extended abstracts on Human factors in computing systems (CHI EA '10). Atlanta, Georgia, USA, pp. 4517-4520 (2010)
6. Hinman, R., Spasojevic, M., Isomursu, P.: They call it "surfing" for a reason: Identifying mobile Internet needs through PC deprivation. In CHI '08 extended abstracts on Human factors in computing systems (CHI EA '08), Florence, Italy, pp. 2195-2208 (2008)
7. Java, A. Song, X., Finin, T., Tseng, B.: Why we twitter: Understanding microblogging usage and communities. In 9th WebKDD and 1st SNA-KDD 2007 workshop on Web mining and social network analysis. ACM, New York, NY, USA, pp. 56-65 (2007)
8. Kaikkonen, A.: Full or tailored mobile web- where and how do people browse on their mobiles? In International Conference on Mobile Technology, Applications, and Systems (Mobility '08), ACM, New York, NY, USA, Article 28 (2008)
9. Kaikkonen, A.: Mobile internet: Past, present, and the future. International Journal of Mobile Human Computer Interaction, Volume 1, Issue 3. (2009)
10. McCarthy, J.: Bridging the gaps between HCI and social media. ACM Interactions 18, 2 (March 2011), pp.15-18 (2011)
11. Oulasvirta, A., Rattenbury, T., Ma, L., Raita, E.: Habits make smartphone use more pervasive. Personal and Ubiquitous Computing. June 16, 2011 (2011)
12. Rogers, E.M.: Diffusion of Innovations. Free Press, New York, 5th Edition (1995)
13. Roto, V., Kaikkonen, A.: Perception of narrow web pages on a mobile phone. In HFT 2003 (2003)
14. Zhao, D. Rosson, M.B.: How and why people Twitter: the role that micro-blogging plays in informal communication at work. In ACM International Conference on Supporting Group Work (GROUP '09), ACM, New York, NY, USA, pp. 243-252 (2009)