

“I want to see what others have found
interesting”:

Online social filtering of news and magazine articles

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<p>Tiivistelmä – Referat – Abstract As the quantity of material available on the Internet grows, problems finding the right information at the right time may follow. Recommender systems have been created to tackle this problem. This study is centered on a collaborative filtering system for news and magazine articles called Scoopinon. Scoopinon collects behavioral information about the reading habits of the users with a browser plug-in. Collaborative filtering can also be called social filtering. Reasons for the use of online social filtering of news and magazine articles and the perceptions about the process of online social filtering are investigated.</p> <p>Analysis was conducted using grounded theory. Research material was interviews that were conducted to ten Scoopinon-users. Interviews were semi-structured. Interviewees were all native Finns. Their ages ranged from 25 to 34. The results of the data-driven analysis were linked to the prior literature on social influence and social comparison.</p> <p>Findings show that online social filtering of news and magazine articles is used to gain access to material that is somehow outside individual's normal routines of news browsing, to avert possible information overload and for entertainment in situations, where one has nothing else to do. Individuals interact with the recommendation algorithm of the Scoopinon by suggesting magazines as possible sources of recommendations or simply by reading. The reading time that the service tracks was interpreted as showing interest, but it was stated that the algorithm cannot understand whether something is evaluated as important. When a recommendation can be tied to certain individual, the perceived expertise of the recommender on the topic of the recommended article handles affects how the receiver evaluates the recommendation. Lack of clear information about the way the Scoopinon's algorithm works led to some misunderstandings. The recommendations the service offered were in some cases falsely thought to originate partly from the reading behavior of the user's personal social network.</p> <p>The most central references: On recommender systems: Schafer, J. B., Frankowski, D., Herlocker, J., & Sen, S. Collaborative filtering recommender systems (2007). On social influence: Deutsch, M., & Gerard, H. B. A study of normative and informational social influences upon individual judgment (1955); Mason, W. A., Conrey, F. R., & Smith, E. R. Situating social influence processes: Dynamic, multidirectional flows of influence within social networks (2007). On social comparison: Festinger, L. A theory of social comparison processes (1954); Suls, J., Martin, R., & Wheeler, L. Three kinds of opinion comparison: The triadic model (2000). On grounded theory: Glaser, B. Basics of Grounded Theory Analysis: Emergence vs. Forcing (1992); Strauss, A., & Corbin, J. Basics of qualitative research. Grounded theory procedures and techniques (1990).</p>			
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<p>Tiivistelmä – Referat – Abstract</p> <p>Seurauksena Internetissä olevan materiaalin kasvusta voi joskus olla vaikea löytää oikeaa tietoa oikeaan aikaan. Suositellujärjestelmät on kehitetty avuksi tämän ongelman ratkaisemiseksi. Tämän tutkimuksen keskiössä on yhteistoiminnallista suodatustapaa käyttävä uutisten ja lehtiartikkeleiden suositellujärjestelmä Scoopinion. Scoopinion kerää selainlisäosan avulla tietoa palvelun käyttäjien lukutottumuksista. Yhteistoiminnallista suodattamista voidaan myös kutsua sosiaalisesti suodattamiseksi. Tutkimuksessa tarkastellaan syitä verkossa tapahtuvan uutisten ja lehtiartikkeleiden sosiaalisen suodattamisen käyttöön ja käsityksiä tästä suodattamisesta prosessina.</p> <p>Menetelmänä analyysissä oli grounded theory. Tutkimuksen aineistona on kymmenelle Scoopinionin käyttäjälle tehty haastattelut. Haastattelut olivat puolistrukturoituja. Kaikki haastateltavat olivat suomalaisia. Haastateltavien iät vaihtelivat välillä 25 ja 35. Aineistolähtöisen analyysin tulokset sidottiin aiempaan kirjallisuuteen sosiaalisesta vaikutuksesta ja sosiaalisesta vertailusta.</p> <p>Tuloksien mukaan verkossa tapahtuvaa uutisten ja lehtiartikkeleiden sosiaalista suodattamista käytetään omien lukurutiinien ulkopuolella olevan materiaalin saavuttamiseen, informaatiohätkyn välttämiseksi ja viihteeksi tilanteissa, joissa ei ole muuta tekemistä. Scoopinionin suositelualgoritmin kanssa ollaan vuorovaikutuksessa ehdottamalla lehtiä suositusten lähteiksi tai yksinkertaisesti lukemalla, mikäli selainlisäosa on asennettu. Palvelun seuraama luku-aika tulkittiin kiinnostuksen osoittamiseksi, mutta esille tuotiin myös, että palvelun algoritmi ei ymmärrä, onko jotakin pidetty tärkeänä. Jos suositus voidaan sitoa tiettyyn yksilöön, tämän yksilön asiantuntemus liittyen suositeltavan artikkelin aiheeseen vaikuttaa suosituksen arviointiin. Selkeän tiedon puute Scoopinionin algoritmin tavasta toimia johti joihinkin väärinkäsityksiin. Joissakin tapauksissa tehtiin väärä oletamus, jonka mukaan käyttäjän henkilökohtainen sosiaalinen verkosto vaikuttaa osaltaan palvelun tarjoamiin suosituksiin.</p> <p>Keskeisimmät lähteet:</p> <p>Suosittelujärjestelmistä: Schafer, J. B., Frankowski, D., Herlocker, J., & Sen, S. Collaborative filtering recommender systems (2007). Sosiaalisesta vaikutuksesta: Deutsch, M., & Gerard, H. B. A study of normative and informational social influences upon individual judgment (1955); Mason, W. A., Conrey, F. R., & Smith, E. R. Situating social influence processes: Dynamic, multidirectional flows of influence within social networks (2007). Sosiaalisesta vertailusta: Festinger, L. A theory of social comparison processes (1954); Suls, J., Martin, R., & Wheeler, L. Three kinds of opinion comparison: The triadic model (2000). Grounded theorysta: Glaser, B. Basics of Grounded Theory Analysis: Emergence vs. Forcing (1992); Strauss, A., & Corbin, J. Basics of qualitative research. Grounded theory procedures and techniques (1990).</p>			
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1 Introduction

The Internet and the information that can be accessed through it has become an integral part of Western society. However, as the quantity of material available on the Internet grows, it can lead to problems in finding the right information at the right time. Online recommender systems have been created to tackle the problem of finding relevant material in the ever-growing pool of information that the Internet offers (O'Donovan & Smyth, 2005). Recommender systems affect what information individuals using them receive.

From a social psychological perspective, the Internet can be seen as a place where people engage in social interaction (McKenna & Bargh, 2000). As a medium, the Internet has the ability to overcome great distances and with it, people are able to maintain and establish ties to people who are far away (McKenna & Bargh, 1999).

This study centers around a recommender system called Scoopinion. The service recommends articles based on behavioral information collected from its users. Scoopinion tracks the time spent on a site that has a news or magazine article on it by using a browser plug-in. In addition, the service monitors mouse movement and scrolling speed. Using the information it collects, Scoopinion tries to measure how well an article has been read. If the service concludes that people have read a certain magazine article thoroughly, the article has a higher probability of being recommended than less read material.

Imagine that you are in a library, which has hundreds or even thousands of different magazines. Some are near you and visible: you are, however, aware that there are more of them than you can see. You decide to take some magazines, sit down and start reading stories from them. As you read, in other libraries far away, the magazines start to gradually change places: some magazines move away from your peer, an individual that has been identified as sharing similar reading habits as you. Some move closer to the entrance, so they gain the attention of your peer earlier when he or she walks into the library. The next day, when you decide to visit the library again, the magazines that are closest to the entrance have changed when compared to the situation the day before.

This is because your peer, and others like him or her, have read magazines in their libraries. This is basically the idea behind recommender systems that use collaborative filtering. In collaborative filtering recommender systems, the recommendations are generated using information about the preferences of other users with similar tastes (Adomavicius & Tuzhilin, 2005). The Scoopinon uses this approach to generate recommendations.

I interviewed ten Scoopinon users. I analyzed the interviews using the grounded theory approach (Glaser & Strauss, 1967). In addition to the user interviews, I have engaged in numerous discussions with the staff of Scoopinon in order to gain information about the service. I also critically examined Scoopinon as a service. The aim of this study is to find out what kind of reasons there are for the use of online social filtering of news and articles. In addition, I will examine how the process of online social filtering of news and magazine articles is perceived. I use the term online social filtering because the participants of my study did not only talk about recommendations received through Scoopinon. They spoke about news and magazine article recommendations received online in a broader sense, including recommendations received through social network sites. In this study, I approach social network sites only as recommendation sources.

It is important to study the phenomenon of online social filtering from the viewpoint of the individuals receiving the filtered material. This is because the amount of information that individuals have access to through the Internet is too large for a single individual to fathom. Individuals can use the evaluations of other people to navigate through the endless amount of content. When recommendations are based on the evaluations of others, they are a part of a social process. Due to this reason, the receiver of a recommendation does not necessarily evaluate the recommended news or magazine article only by its content. The prior knowledge and the assumptions about the individual or individuals who have recommended the article may also affect the evaluation process. Resnick and Varian (1997) state that recommender systems assist in decision making situations where individuals lack personal experience that is necessary to be able to compare different alternatives.

I analyzed my research material using grounded theory (Glaser & Strauss, 1967). I conducted the analysis before reviewing prior literature, as suggested by Glaser (1992, pp. 31–32). My findings suggest that the social influence approach, especially the literature on majority opinion (e.g. Deutsch & Gerard, 1955) and the theory of social comparison (Festinger, 1954) are both relevant ways for approaching online social filtering. Collaborative filtering systems such as Scoopinon recommend material based on similarities different users share (Adomavicius & Tuzhilin, 2005), so one can easily see the connections to Festinger's (1954) theory of social comparison: people engage in social comparison with others who share similarities with them. Recommendations can also be seen as results of the majority opinion. What articles have been most read in a certain subset of people affects what articles are recommended for the individuals belonging to that subset. This can be used as a link to literature on social influence.

In the second chapter I will discuss online news consumption and what recommender systems are. I will present the theoretical background of my thesis in the third chapter. In addition to the social influence approach (e.g. Deutsch & Gerard, 1955) and the theory of social comparison (Festinger, 1954) mentioned above, I will discuss how individuals appraise media items according to Helle et al. (2011). After I have discussed the theoretical background of my study, I will introduce my research questions. Research questions are followed by a chapter where I will discuss the research material and participants of this study, accompanied by an explanation of how I conducted my research using the grounded theory approach (Glaser & Strauss, 1967). In the discussion, I will discuss my findings and their relation to prior literature.

2 News reading and recommender systems

In this chapter, I will discuss some matters that will clarify the background of my study. I will briefly discuss the reasons for news reading in general and how the Internet has affected news consumption. After this I will discuss recommender systems and the Scoopinon, the recommender system that my study centers on.

2.1 Online news consumption

According to Tewksbury, Hals & Bibart (2008), research that has been conducted on audience news gathering indicates the existence of two basic types of processes. These are (1) information browsing, the process of selecting a range of topics when using news media and (2) information selecting, in which the news consumption is limited to a few specific topics.

Whereas information selection may be motivated by finding information on a topic that an individual finds interesting at the current moment, motivation behind browsing may be different. Motivation behind browsing news has been explained as monitoring current social environments (Tewksbury et al., 2008). News have powerful agenda setting capabilities: television broadcasts of news have been shown to increase the perceived importance of the issues discussed in them in the minds of the audience (Iyengar & Kinder, 1987, p. 112). People also may be browsing in order to find surprising new stories for entertainment purposes. One possible motivator of browsing is that it may offer some interpersonal utility. Browsing through a wide range of topics may prepare people for interactions with others by offering information that can be useful in future conversations. (Tewksbury et al., 2008.) Tewksbury et al. (2008) state that the aforementioned three reasons for browsing can be coined under the umbrella term of discovery. People do not always seek information to fill in some gap in knowledge. The selection of exposure to certain media is an activity in itself. Media is not used only as a utility for reaching specific content.

Newspaper sales are in many places stagnant or declining. There has been a lot of talk about the death of print, which refers to the end of printed media as readers migrate into the digital world (Fortunati & Sarrica, 2010). This, however, does not necessarily mean that traditional news outlets have lost their audience. By traditional media outlets, I refer to organizations that either have printed newspapers or are present in television networks. Online news readers still often read the websites of traditional news outlets. Readers tend to select different material on the web when compared to traditional media. The large amount of material available and the hyperlink and menu structure that is present on Internet's news sites offer readers more control over what news to receive.

The Internet has made it possible for the readers to easily choose news based on their own interests. (Tewksbury, 2003.)

In Tewksbury's 2003 study about American's news reading habits the sports were the most viewed subject in online news, measured both in percentages of all views and all viewers. Together, news about national issues, politics, opinion pieces and editorials as well as state and local news received views from 45.6 % of people who selected some news topic while surfing the web. According to the survey part of the study, online news readers were frequent users of traditional media and they followed public affairs content via it. Leino, Rähkä & Finnberg (2011, p. 172) argue that online news have become the most important source for news among young adults in Finland. However, they base this argument on a survey that had 147 respondents, which is not a representative sample of the population of Finland. Nevertheless, the study indicates that online news are an important news source in today's Finland.

Tewksbury (2003) found a discrepancy between people's reported reading behavior and their actual one. People tend to read less public affairs material online than surveys state. This is somewhat related to how Scoopinon markets itself: they state that "every story Scoopinon offers for you has been read well" (www.scoopinon.com/about, consulted March 28, 2013). By this statement, the staff of Scoopinon refers to the services way of collecting information about users' actual reading behavior, rather than their explicit evaluations about it.

2.2 Recommender systems

Berkovsky, Kuflik & Ricci (2007) give the following broad description of recommender systems:

Recommender systems provide users with recommendations about products and services they may like. They generate personalized recommendations, i.e., recommendations that are tailored to the user. This task is achieved by exploiting various knowledge sources, which store information collected during past interactions with users searching or providing recommendations, and the evaluations of those recommendations. (p. 246.)

Recommender systems use algorithms in order to generate recommendations. An algorithm is a step-by-step sequence of instructions that is used to yield a preferred outcome (Ahloth, 2012, p. 1). Algorithms are often associated with information and communication technology.

Recommender systems can usually be classified into three different categories based on how their recommendations are generated: to (1) content-based recommenders, (2) collaborative recommenders and (3) hybrid recommenders. First, in content-based systems, recommendations are based on users' past preferences. These can be for example news topics that a user has read before. Second, in collaborative systems, the recommendations are generated using information about what other users with similar tastes have liked: these systems rely on social filtering. (Adomavicius & Tuzhilin, 2005.) Recommender systems using collaborative are built on the underlying assumption that preferences of individuals correlate with each other. It would be impossible to generate recommendations otherwise. (Pennock, Horvitz & Giles, 2000.) Ratings can be collected in collaborative systems either explicitly or implicitly. Explicit methods are those, where the user gives his or her opinion about a certain item. Implicit methods refer to data collection techniques, where users' actions are monitored. For example, a website can monitor what items user has bought in the past and use this data to provide the user with recommendations. (Schafer, Frankowski, Herlocker & Sen, 2007, p. 293.) Third, the hybrid systems are different kinds of combinations of these two (Adomavicius & Tuzhilin, 2005). Content-based recommenders are only able to handle virtual objects, whereas collaborative techniques can also be used to evaluate real world objects, such as music or movies (Lueg, 1997). Hybrid systems can, for example, be used to avoid one of the problems of collaborative filtering techniques. In a situation, where a new item is added to the database where the recommendations are collected from, it does not usually have any ratings by users. In this kind of a situation, content-based method of filtering can be used to add the item to possible recommendations (Burke, 2002).

Recommender systems use different kinds of strategies in order to generate recommendations for their users (Adomavicius & Tuzhilin, 2005). Much of media

influence is mediated by other people (Mason, Conrey & Smith, 2007). One could argue that recommender systems mediate what media items are the sources of influence.

Recommender systems are sometimes also referred to as social filtering systems or collaborative filtering systems. These terms may be presented as synonymous in some literature (Lueg, 1997). However, as Adomavicius and Tuzhilin (2005) state, all recommender systems are not necessarily using collaborative techniques. In this study, I will use the broader term of recommender system. This is because, as I mentioned before, it is possible to distinguish different kinds of recommender systems on the basis of how they filter content (Adomavicius & Tuzhilin, 2005; Resnick, Iacovou, Suchak, Bergstrom & Riedl, 1994). Since all recommender systems do not use social filtering methods, I argue that it is less confusing to refer to them using the broader term. Resnick & Varian (1997) also make a point that collaborative filtering is an insufficient term even when it comes to systems that rely on social filtering. Recommenders may not explicitly collaborate with the recipients, since these systems do not always require that the recommenders are familiar with the recipients. However, I will use the term collaborative filtering when I explicitly refer to recommender systems that use social information in their recommendation process.

In this thesis, I will focus on online recommender systems. This clarification should be made, since social filtering is not limited to recommender systems. Lueg (1997) states that reading a traditional printed newspaper is also a result of a social filtering process: reader trusts the editor of the newspaper to choose most interesting and important articles, when she or he decides to use it as a source of information. But there are competing stories that are suggested to the editor and by choosing between them, she or he also chooses what the readers will receive from the paper.

Recommender systems can be seen as an attempt to automate the process of word of mouth –recommendation which happens in everyday life between people (Lueg, 1997). It could be argued that this aim has not yet been accomplished. Research indicates that people still prefer the recommendations they get from their friends more than those received through recommender systems (Sinha & Swearingen, 2001). Schafer and his colleagues (2007, p. 321) argue that the situation, where technology can begin to

accurately automatically recognize the information that is important to people is probably decades, or longer, away.

2.2.1 Reasons for the use of recommender systems

Based on user studies, Schafer et al. (2007, p. 296–297) have listed some of the different ways recommender systems incorporating collaborative filtering elements are used. These include finding new items that one might like, and also finding advice on some items. An example of this would be when an individual is trying to decide whether to buy a certain product. Collaborative filtering is also used to find users of the recommender system that one might like, since sometimes it is more helpful to find the source of preferred material rather than just the recommended items. In other words, recommender systems may be used to identify people with similar tastes. Sometimes recommender systems are used to find material that suit the needs of a certain group, rather than just an individual's. For example, couples might use them to find a movie that is suited for the tastes of both of them. Another use that has been identified in user studies is finding items that are a mixture of old and new: one might want to find some place to eat, but suggestions can include restaurants that have been visited before, in addition to places yet to be visited. It is sometimes also necessary to find items that relate to a specific task: one example of this kind of a situation could be writing a research paper. When writing a research paper, an individual does not want to find research papers that he or she might like. Instead, it is far more important to gain access to literature that is relevant to the specific subject of the current research.

O'Donovan and Smyth (2005) say that recommender systems have emerged in response to the information overload problem: people have difficulties in finding the right information at the right time. Information overload can be explained simply as “receiving too much information” (Eppler & Mengis, 2004, p. 326). The concept of information overload is difficult to define and there exists a number of different terms used to define it in different scientific fields (Lincoln, 2011). Eppler & Mengis (2004) state that the terms that have been used to define the concept include (but are not limited to) cognitive overload (Vollman, 1991), communication overload (Meier, 1963) and knowledge overload (Hunt & Newman, 1997), just to mention a few.

Collaborative recommender systems aim to help people to make choices based on the opinions of other people (Resnick et al., 1994). They were developed because of the shortcomings of keyword-based content filtering in the 1990s: even though the keyword-based approach did do an adequate job of describing the content of a document, they lacked the ability to evaluate the context or the quality of the surrounding document where the keywords appeared (Schafer et al., 2007, pp. 293–294).

2.2.2 Information filtering

Information filtering can refer to two processes: (1) filtering in, which means finding desired information and (2) filtering out, which refers to eliminating information that is perceived as unwanted (Resnick et al., 1994). Every recommender system is using some form of filtering when providing recommendations.

Malone, Grant, Turbak, Brobst and Cohen (1987) distinguish between three information filtering strategies that people can use in order to find material of some kind of importance: cognitive, social and economic. Cognitive strategies work by characterizing the contents of the message and the information needs of the recipients, and comparing these two in order to match the needed information with the recipients. When using social filtering strategies, message content is not the only thing that is considered: sender of the message is evaluated together with its topic. Economic filtering is used when people need to make cost-versus-value evaluations: if time is limited, very long messages may be disregarded due to their time consuming nature. Resnick and his colleagues (1994) later used the categorization made by Malone et al. (1987) to distinguish between different kinds of possible online recommender systems.

Cognitive strategies are content-based. When using these strategies, written material is filtered by the text it includes, for example by matching keywords. (Malone et al., 1987.) Another way of using content-based filtering is to search for material based on certain rules. Few examples of such rules could be that text should include one of certain words or should not include some word. (Resnick et al, 1994.) This kind of filtering is often used by Internet search engines. They recommend material based on the words that user uses as an input (Ansari, Essegaier & Kohli, 2000).

Social filtering is based on peoples' relationships with each other and the judgments they make about others. Collaborative filtering is a form of social filtering. It is based on people's evaluations about content. It is effective, since people can make judgments computers have difficulties with. Questions like quality, context or relevancy are hard to fathom by computers, but individuals can make their own subjective evaluations on these dimensions (Resnick et al., 1994). For example, social news aggregators Digg.com and Reddit.com have adopted a model in which quality is measured by users' independent votes (Lerman, 2008).

Malone et al. (1987) state that economic information filtering is based on cost-benefit assessment. Furthermore, it can also be based on explicit or implicit pricing mechanisms. In an offline situation, mass mailings of advertisements, which have low cost per addressee for the sender, could be labeled as unimportant using the economic filtering logic. Resnick et al. (1994) say that this idea could be used in article recommendations by filtering out articles that are posted to numerous sources, or providing payments (not necessarily real money) for producers of content based on how popular the material they create is.

2.2.3 Weaknesses of recommender systems

Recommender systems are certainly not foolproof. In many recommender systems that use collaborative filtering techniques an individual can easily avoid contributing to recommendations. Users have the possibility of only enjoying the end results, thus free riding in the system (Resnick & Varian, 1997). In order to encourage users to give explicit ratings, some collaborative filtering systems offer different kinds of "site points". In some cases, these points may be exchanged for real world items, such as t-shirts, or special privileges on the site. (Schafer et al., 2007, p. 310.) Another problem of recommender systems that rely on ratings given by users is that it is possible for content creators to create large amounts of positive recommendations to their own material and negative for their competitors. Acting this way, they can generate more visibility for their own content and less for that of competitors. (Resnick & Varian, 1997.)

Usually recommender services that use collaborative filtering can only recommend material that is already in their database. For example, they cannot suggest movies that have not yet been released, even though people have means to predict their preferences in situations like that, such as “I liked all prior movies by the director” or “I’m a huge fan of this genre”. (Ansari et al., 2000.) Also, when a new item is added to the database of a recommender system which relies on ratings generated by its users, it often does not have any ratings. An item that has no ratings cannot be recommended. (Schafer et al., p. 311.) Collaborative filtering basically aims to automate word of mouth recommendation by and for people who share similarities (Ansari et al., 2000; Lueg, 1997). This is also the basic idea of Scoopinion, the recommendation service whose users were participants of this research.

Another possible weakness of recommender systems is that in some of them the content that is submitted by the most connected users gains the most visibility. This of course requires that the people are able to connect with each other in the service. In such services, content’s quality is not necessarily the reason it gets visibility, if it is submitted by a person who has a large amount of contacts. Due to social filtering, people using contacts in their own social network to filter content submitted to the service, the high ratings of content can be result of interpersonal reasons, rather than evaluations of the content. (Lerman, 2008.)

Lerman (2008) found out that users of Digg.com, a social news aggregate, not only tend to vote positively material submitted by their contacts, but to smaller extent also material their contacts have liked. The user interface of Digg.com allows users to see what their contacts have liked. Behavior where individual’s give positive votes for content submitted and liked by their contacts may lead to what Lerman (2008) described as “tyranny of minority”. Lerman (2008) uses this concept to describe the situation where submissions by people who have large social networks in the service tend to form a large amount of the most popular material. Popularity of the said material also leads to greater visibility. People who have a large amount of contacts in the service may also get more contacts in the future: according to Barabási & Albert (1999), most real world networks exhibit preferential connectivity. This means that connections tend to form to

nodes that already have a large amount of connections. In social networks these nodes are individuals who are connected to other people.

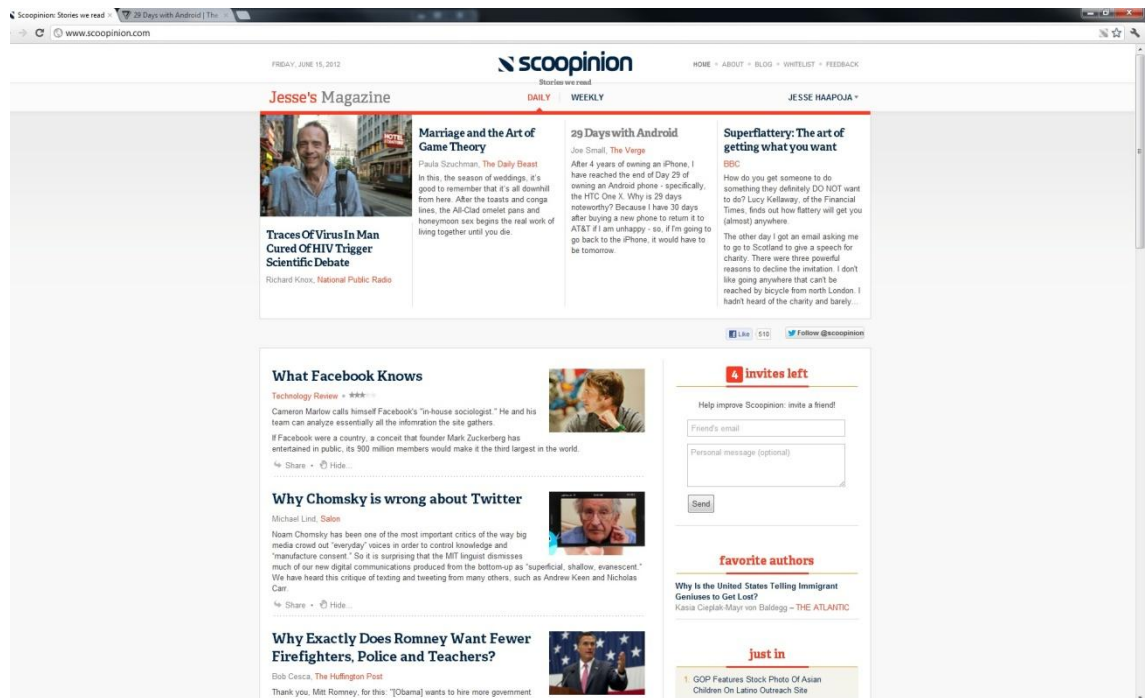
Assigning accurate explicit evaluation of content requires high cognitive load. The amount of evaluators is, at least in some systems, considerably lower than the number of items. Both of these factors can lead to data sparsity in recommender systems that rely on user submitted explicit evaluations. (Rafaeli, Dan-Rug, & Barak, 2005.) On the other hand, collaborative filtering systems do not necessarily need large amounts of ratings from a large amount of people: small amount of early adopters that are relatively active in rating items is sometimes sufficient to make a recommender system usable for others. These later adopters of the system do not have to be as active in evaluating items in order to keep the service up and running. (Schafer et al., 2007, p. 310). Herlocker, Konstan & Riedl (2000) state that the users of collaborative filtering systems have a hard time trusting the services when making big decisions like choosing the target of a honeymoon, and that users might trust the systems more if they provided more information about the reasons why something is recommended.

2.3 Collaborative filtering system Scoopinion

Since this study is centered on Scoopinion, it is in order to describe the service and changes that it has gone through. The information I present about the Scoopinion is based on multiple discussions I have had with the staff of the service, unless mentioned otherwise. The discussions took place between the summer of 2012 and the spring of 2013. Image 1 shows how the service looked like when I was collecting my research material.

Image 1

Layout of the Scoopinion website in the summer of 2012.



Scoopinion is a personalized magazine article recommender system that collects behavioral information about the users via a browser plug-in. User installs an add-on to her or his browser, which monitors and collects information about mouse movement, page scrolling and website's placement on the computer screen. The most important information it collects is the time spent on a website. Scoopinion then uses this information to evaluate how well the user has read an article. This evaluation is used as a measure of article quality.

Scoopinion does not collect information from the user on every webpage he or she visits: it only activates when the user is on a site that is on the whitelist of Scoopinion. Whitelisted websites are online newspapers or magazines. They are added to the list manually by the Scoopinion team.

Scoopinion compares reading habits of its users with each other and forms groups from people that share similar habits. This makes it a collaborative recommender system. These groups are then used to make recommendations to users: if some people sharing similar habits have read certain article, the algorithm offers it to you under the

assumption that you might also be interested to read it, since you share similar reading patterns with other users that have read it. Recommendations are delivered via the Scoopinon website and bi-weekly e-mail digests. The Scoopinon website also offers a scrollable list. In this list, 16 first articles are personalized. The order of the articles that are lower on the scroll is based on the reading habits of every Scoopinon user. The most read articles are higher in the scroll. This information is currently unavailable on the Scoopinon website: users do not have access to information where it is said which articles on the scroll are based on their own behavior.

Before its evolution to a personalized recommender system, Scoopinon shared similarities with social network sites. It was centered on the idea of sharing articles automatically with other users. Users had their own profile pages in the service and they were able to see profile pages of other users. User information was imported from the social network site Facebook: the creation of one's own personal Scoopinon profile page happened by linking Scoopinon with one's Facebook-account. According to Scoopinon website, Scoopinon retrieves users profile picture, full name, e-mail address, age, location and list of friends if the service is linked to one's Facebook-profile (www.scoopinion.com/about/faq, consulted March 28, 2013). The profile pages in the earlier version of the service showed statistics about the users' reading behavior: information about what news- and magazine-sites he or she had spent time on and what stories the user had read. Since then, the possibility of visiting other users' profiles on the service has been removed. The current version of Scoopinon does not offer a possibility to see or contact other users via the service.

Even though my main focus is not on social network sites, I will address them in the results section because of Scoopinon's history and because the participants of this study spoke about them. Thus, it is in order to give a brief description of what social network sites are. boyd and Ellison (2007) describe social network sites in the following way:

Social network sites are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate

list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. (p. 211.)

In many sites, participants are not looking for new connections. Instead they are looking for links to individuals that are already in their social networks (boyd & Ellison, 2007). On the other hand, there has also been research which has found that the most common reason for the use of social network sites is the possibility to form relations with new people, followed by the possibility to stay in contact with friends and acquaintances (Brandtzæg & Heim, 2009).

3 Theoretical background

In this chapter, I will present the theoretical model of media appraisal created by Helle et al. (2011). This is in order, since recommender systems rely on the users' explicit or implicit evaluations of content. After this, I will discuss two approaches that I link to the social aspects of the recommender systems: social influence (e.g. Asch, 1956, Deutsch & Gerard, 1955) and the theory of social comparison (Festinger, 1954). Collaborative filtering recommender systems often work by measuring popularity and giving visibility for popular items (Lerman, 2008) and popular items tend to become even more popular (Salganik, Dodds, & Watts, 2006). Due to these reasons, I argue that the social influence of majority's opinion is a valid approach to collaborative recommender systems. Also, recommender systems using collaborative filtering often provide recommendations that are based on behavioral similarity (Yaniv, Choshen-Hillel & Milyavsky, 2010). Research in the field of social comparison has shown that individuals use similar others to predict their preferences (Suls, Martin, & Wheeler, 2000, 2002). Based on the results of my analysis which I conducted by using grounded theory (Glaser & Strauss, 1967), I argue that my findings are related to both of these approaches.

3.1 Appraisal of media items

Collaborative filtering recommender systems, such as Scoopinion, filter or evaluate items based on the opinions of other people (Schafer et al., 2007, p. 291). Scoopinion recommends online magazine articles. However, collaborative filtering systems can be

used for recommending any type of material, not just media content (Lueg, 1997). This work focuses on media items. In this chapter, I will present different dimensions of media appraisal, based on the model created in by Helle et al. (2011).

In their theoretical model of media experience, Helle et al. (2011) separate different dimensions that affect user's engagement with media, and ways in which the users evaluate media emotionally. These appraisal dimensions characterize the meaning of media to its user. The eleven dimensions on which media are appraised on are usefulness, interestingness, understandability, trustworthiness, familiarity, unexpectedness, brand experience, price/value, playfulness and entertainingness (Helle et al. 2011, pp. 17–21).

Usefulness is a subjective perception of a media item's usefulness for its observer. The media item is perceived as something that helps the user in attaining some goal (Helle et al., 2011, p. 18). Barry (1994) found that when individuals are looking for information relevant to a certain situation, usefulness of the documents is not only evaluated using information related to documents, such as sources and availability. Background, beliefs and personal preferences of the individual looking for information also have an effect when individual evaluates relevancy.

Interestingness is a part of media item's significance for self: media items that are appraised as interesting are remembered better, they are more entertaining and persuasive. Interestingness affects behavior. For example, it is more likely that a user reads articles that have interesting headlines. (Helle et al., 2011, p. 18) What human beings consider interesting is not static and varies in different situations. Lueg (1997) suggests that interest is dynamically generated when an individual is interacting with his or her current situation.

Understandability is of importance, since non-understandable media items are expected to cause frustration and negative affect. Trustworthiness is particularly important for news reading. It refers to the perceived truth value of the used media. (Helle et al., 2011, p. 18.) In the online environment, perceived trustworthiness of a website is partly dependent on the website's layout, especially when a user is creating a first impression

of the trustworthiness. Clear layout and display are perceived as signals of a trustworthy site in the eyes of the individuals visiting the site. Layouts that have banner adverts and distracting graphics, boring web design, complex layout and too much text are perceived as signals of a less trustworthy site. (Briggs, Burford, DeAngeli & Lynch, 2002.) Briggs et al. (2002) also found in their study that when seeking advice on financial issues, corporate feel of a website might be perceived as negative, since independent sources are perceived to be more credible than big corporations. In computer mediated social situations, such as online advice seeking, assumptions about the advisor's inner motivations affect trustworthiness (Briggs et al. 2002).

Familiarity refers to the familiarity of the media channel or media provider that the individual is using. This is, for example, related to people's tendency to keep reading the same newspapers and journals. It can be considered on multiple levels. Familiarity can refer to the familiarity of a certain media channel, such as computer, or familiarity with certain media services. It can also refer to certain items and activities, such as reading books. (Helle et al., 2011, pp. 18–19.) An average American Internet user often gets his or her online news from media outlets that also publish or broadcast news through traditional media channels (Tewksbury, 2003). Brand experience is expected to contribute to emotional responses to media. It refers to brand related stimuli such as design. (Helle et al., 2011, p. 19.)

Price/value refers to the role of price in decision making when choosing media products and content. Consumers are used to paying for certain services, but have grown accustomed to receiving others for free, such as basic online news (Helle et al. 2011, p. 19). If something is not seen as valuable, there is little reason to pay for it. For example, in Belgium newspaper sales have declined, especially among the younger readers, who have complained about newspaper language being too complicated and requiring too much background information (Raeymaeckers, 2004). Playfulness refers to the motivator of behavior. A product that aims to motivate users by playfulness should elicit joy and a sense of humor in children and for example, comedic expression and dynamicity in adults (Helle et al. 2011, p. 20).

The final dimension of appraisal that Helle et al. (2011, p. 21) present is entertainingness. In order to be entertaining, a media item should hold the attention of the user in an agreeable or pleasant way. Entertainingness is essential for media items that aim to amuse users. It is sometimes considered inappropriate in factual content, since entertaining elements such as special effects may divert the audience's attention from the actual message.

3.2 Social influence

Study of social influence, the study of the different ways people affect the beliefs, feelings and behaviors of others, is central in social psychology (Mason et al., 2007). Sassenberg & Jonas (2012) define social influence as the influence that a person or a group has on an individual's thoughts, actions and psychical states. Social interaction between people always involves some amount of social influence. Such ordinary behavior as asking a question can be considered as an attempt to influence other individual's behavior, since the asker is trying to get an answer for her or his question (Sassenberg & Jonas, 2012).

Concepts such as persuasion, conformity and obedience are all directly related to social influence. In a broader sense, social influence also relates to areas like attitude and stereotype formation, as well as social learning, intergroup relations and power. Although there is a large amount of research that indicates that social influence has effects on individuals, it should be remembered that it does not always result in assimilation or movement towards the advocated position of the source of influence. (Mason et al., 2007.)

3.2.1 Majority influence

Regarding my thesis, the most relevant approach that social influence literature offers is that of the majority influence. Large amount of research has been conducted on how majority's opinions influence individuals (e.g. Asch, 1956). Research has shown that a minority can affect the opinions of individuals too, if the influence is consistent (Moscovici, Lage, & Naffrechoux, 1969). Deutsch & Gerard (1955) stated that the majority opinion influences people in decision making situations via two routes: normative and informational. Both kinds of social influence affect evaluations.

Normative influence affects them due to people's tendency to yield to social pressure. Informational influence affects them because average opinion is seen as a valid source of information (Deutsch & Gerard, 1955; Yaniv et al., 2010). Informational influence is based on the people's will to be accurate whereas normative influence relies on people's will to maximize social outcomes. In other words, people try to get information about reality from others and, thus, the majority's views affect via the informational route. When influence affects via the normative route they try to avoid punishments from others by complying with the majority's will and opinions. (Deutsch & Gerard, 1955.) The most well-known experiment regarding the majority's normative influence is probably Solomon Asch's (1956), which showed that individuals may comply to the opinions of the majority even in situations where they can clearly perceive that the opinion which the majority shares is wrong. In the Asch's (1956) experiment participants were asked to compare lengths of lines. Participants were put into a situation where they were a lone minority. Other people present, who actually were assistants in the experiment, gave a false statement unanimously about a line's length. Their error was clearly visible. Only a minority of the participants always gave the correct answer despite the social pressure. In the experiment of Asch (1956), the participants complied with the opinion of the majority. Informational majority influence can also lead to false answers in situations where individuals do not have a reason to comply to the norms of a group. Lau, Kwok & Coiera (2010) have shown that individuals may change their answers from right to wrong in health related questions in online settings if the opinion of majority differs from their own.

The difference between normative and informational majority influence is not clear in all situations. Persuasive information and normative pressure often work in similar ways in groups and lead to similar outcomes (Price, Nir, & Cappella, 2006). For example, polarization of opinions in a group, the tendency to move towards a more extreme position in the direction where the majority of the group members' opinions are, can be a result of perceived norms or biased information (Postmes, Haslam, & Swaab, 2005; Price et al., 2006).

After the 1950s, when Deutsch & Gerard (1955) published their article where the two types of social influence were distinguished, there have been modifications to this

original categorization. It has been stated that Deutsch & Gerard's (1955) concept of normative influence actually refers to compliance (McCauley, 1989; Sassenberg & Jonas, 2012). This means that the person affected by the majority does not internalize majority's opinion or attitude, but rather changes his or her behavior just to avoid negative outcomes (McCauley, 1989). There also have been arguments based on the current state of research that propose the existence of two different informational influences: norm-based and interpersonal (Sassenberg & Jonas, 2012). It should be noted that the original dual-process classification of Deutsch & Gerard (1955) is also still used in research (e.g. Park & Lee, 2008; Yaniv et al., 2010). For this reason, I will mostly refer to social influence using the Deutsch & Gerard's (1955) separation of normative and informational social influence. However, I will return to the differentiation between the two types of informational influence based on current research in the following paragraph.

Deutsch & Gerard's (1955) original definition of informational influence has been questioned. It has been argued that some of it is based on group-normative processes: this can be labeled as norm-based influence (Sassenberg & Jonas, 2012). Sassenberg & Jonas (2012) state, that according to social identity theory (Tajfel & Turner, 1979) and self-categorization theory (Turner, Hogg, Oakes, Reicher & Wetherell, 1987), opinions and arguments that are in line with the current in-group norms are perceived more valid compared to those differing from them. This claim is based on John C. Turner's (1991) approach to social influence. Turner (1991, p. 161) states that from the perspective of the self-categorization theory, similar others in the same situation do not only tend to act in the same way. Individuals also expect that they act the same way as the similar others, if they categorize themselves with these others.

Sassenberg & Jonas (2012) state that social influence takes place for purely informational reasons too. This is likely to occur when people perceive themselves as distinct individuals, as opposed to identifying as members of a group. Sassenberg & Jonas (2012) continue to describe this kind of informational influence as interpersonal influence: individual's personal needs channel how relevant others are used to validate information when personal influence is salient. In computer mediated communication situations, interpersonal influence tends to be reduced when compared to face-to-face

situations. Anonymity and psychological isolation heighten individual's focus on personal needs and self-awareness, resulting in a lower likelihood of social influence.

(Sassenberg & Jonas, 2012.)

3.2.2 Social influence and recommender systems

Considering recommendation systems such as Scoopinion, social influence affects presumably more through the informational route. This is because there is less reason to comply with norms in situations where people make decisions in private. There is no exposition to benefits and costs of deviance or compliance in private decision making situations (Yaniv et al., 2010).

It is in order to describe how individuals receive information in computer mediated situations, when discussing how informational influence affects through recommender systems. Senecal & Nantel (2004) have divided computer mediated information sources into four categories. The first category is personal sources providing personalized information. This refers to information received from other person that is specifically meant for the receiver. The second category is personal sources that provide non-personalized information. This refers to information that can be sourced to certain human being, but the information provided is not personalized. For example, an expert's public opinion about the stock market would be non-personalized information. Impersonal sources providing personalized information are the third category. Recommender systems offering personalized recommendations fall into this category. The fourth category includes impersonal sources providing non-personalized information. Online magazines offering product reviews and comparisons are an example of this category.

Popularity lists that are used in many online services are an example of how majority influence is used in service design. On Facebook, for example, users can see a list of most popular applications. Designers behind these applications benefit from the increased visibility of their product, but popularity lists are also useful for the users. Using popularity lists makes it easy to find applications that have been thoroughly tested by other users. This indicates that they are reliable. Popularity also works as a signal for the application's functionality: its superior qualities in comparison to the

competition. (Onnela & Reed-Tsochas, 2010.) Dieberger, Dourish, Höök, Resnick and Wexelblat (2000) label the use of these kinds of lists for help in decision making processes as part of *social navigation*. Actions of other people leave traces in popularity lists and, thus, other users can use the lists to guide them to pre-evaluated content. It has been shown that if the amount of readers a news article has gathered is shown, people tend to read the articles that have the most and the least amount of prior readers (Knobloch-Westerwick, Sharma, Hansen, & Alter, 2005). Knobloch-Westerwick et al. (2005) state that the surprising result of the least read articles gaining popularity could be because the articles are perceived to be more recent than others. Another explanation offered was that reading less popular content may add to the self-uniqueness experience of the reader.

Popularity lists also have an effect on how people evaluate content. Salganik et al. (2006) found in their experimental setting that social influence affects individual's ratings of songs in situations, where songs are displayed to subjects with information about how many times they have been downloaded. When the popularity, in this case the amount of downloads, became more salient, so did its effect to the individual decisions of the subjects. Popular songs became more popular and less popular even less popular. However, when comparing different groups that the subjects were part of, there were results, which were linked to the content. The "best" songs never did very badly in any of the groups, and the "worst" never got very popular. Every other result was possible. Situations where the amount of downloads from other users were shown led to feedback-loops of social influence. In feedback-loops, the social influence is not unidirectional: instead feedback causes socially influenced behavior to increase influence (Mason et al., 2007). In other words, if something becomes popular among people, feedback-loop means that the popularity increases further due to item's earlier popularity. In the experiment of Salganik et al. (2006), a large amount of downloads by people influenced further downloads, resulting in a situation where the most downloaded songs were continuously downloaded more than others. The success and failure were both amplified due to the social influence caused by revealing the download-amounts of other users. Indicated popularity of items among other consumers has been shown to have more influence in the decision making process than the recommendations made by experts (Chen, 2008). Reingen (1982) experimentally

showed that showing individuals a list of other compliers before asking them to comply with a request increased support for a given cause. People who saw a list of other compliers donated more money and blood than those who did not see the list.

Knobloch-Westerwick et al. (2005) have shown that individuals read articles for a longer time if they have been explicitly evaluated as interesting by other people when compared to articles that have been evaluated as less interesting. Since social influence is dynamic, it can lead to unpredictable results. However, it should be taken into consideration that repeated social influence does not necessarily have a linear and additive effect on individuals. (Mason et al., 2007.)

3.2.3 Social influence in different kinds of social networks

Mason et al. (2007) present in their review article different kinds of social networks. These networks offer different settings for the flow of social influence between individuals. Building on this work, I will discuss how recommender systems can be approached using different concepts of social networks.

Popularity lists often show what is most popular among all users. This kind of network of influence can be called an all-connect network. In an all-connect network, all individuals influence each other. (Mason et al., 2007.) However, many recommender systems work by grouping people based on their interests (Yaniv et al., 2010). In these cases, alternative models of social networks might be more useful when examining how social influence flows in the systems.

The grid network model of social influence (see for example Mason et al., 2007) may be useful when considering recommender systems. In the grid model, people's opinions are not influenced by all individuals in the network. Instead, only their neighbors in the network affect the individual's opinions: Mason et al., (2007) state that the grid model is useful for examining broader phenomena like voting behavior, since it relies on a limited amount of connections to others, but in a larger population than small groups. This idea can be applied to recommender systems where the recommendations are based on the actions of certain subsets of people. These subsets can be thought as direct neighbors in the network. Since the recommender systems recommend material that has,

actively or passively, received positive evaluations in the system, the recommendations can be seen as the result of the majority opinion of these subsets.

Weakness of the grid model in real world settings is that it assumes that everyone has the same pattern of connections as everyone else, although the social networks of the real world are in fact often heterogeneous. People have different amount of links to others. (Mason et al., 2007.)

In dynamic networks individuals' links to each other change over time (Mason et al., 2007). These networks can also be a useful way to describe recommendation systems. Recommender systems' user bases may vary over time and the algorithms may be tweaked to create subsets of individuals differently. These reasons may lead to a situation where the people whose actions affect the recommendations that a given individual receives may change over time. It is important to remember the dynamic nature of social networks in real-life settings also because these networks have a tendency to be formed because of similarities people in them share (Mason et al., 2007). This similarity of peers that form a social network is called homophily (Mason et al., 2007; McPherson, Smith-Lovin, & Cook, 2001). Similar opinions of people in certain networks are not, at least always, a result of social influence. The similarity of opinions often predates the links between people, that is, we form relationships between other individuals that are somehow similar to us (Mason et al., 2007; McPherson et al., 2001). This is important, when one considers recommender systems that rely on collaborative elements. In these services, the links between individuals are usually based on similarities that the system has recognized between certain users. This in turn leads to a situation, where the recommendations are received from similar others (e.g. Herlocker et al., 2000). McPherson et al. (2001) have argued that the social selection processes underlying the formation of social networks are in fact more important than the flow of social influence in these networks. I will discuss how the opinions of similar others affect individuals in the next chapter, where I will focus on the theory of social comparison (Festinger, 1954).

Any model of social influence must consider what network is the most relevant to certain attitude, interest or behavior. Individuals do not have just one unique social

network: size and importance of the network vary if one for example considers the large amount of acquaintances people have or just few close friends. (Mason et al., 2007.)

3.3 Social comparison

In this chapter, I will discuss the theory of social comparison, originally created by Leon Festinger (1954). I will also discuss why the social comparison is a relevant viewpoint when examining online recommender systems. I will also present Suls et al.'s (2000, 2002) triadic model of opinion comparison, which is a more recent development of Festinger's (1954) theory. I will also discuss how recommender systems can be approached from a social comparison viewpoint.

3.3.1 Social comparison of abilities and opinions

Leon Festinger (1954) stated in his social comparison theory that individuals tend to compare their abilities and opinions to those of others in order to get information about their abilities or about the validity of their opinions. According to Festinger (1954), humans have a drive to evaluate their own abilities and opinions, since it may be punishing or even potentially fatal to hold incorrect opinions or inaccurate evaluations about one's abilities in many situations. In the context of the recommendation algorithms, social comparison is commonly built in their design. They often group people by similarities in their behavior and base their recommendations to these similarities. For example, many online stores show the potential customer information about what others who have looked or bought in addition to the item visitor is currently looking at (Yaniv et al., 2010). According to Festinger (1954), the motive for all social comparison is to gain accurate self-evaluation. However, evidence that has amassed after 1950s suggests that people usually engage in social comparisons in order to gain self-enhancement and that individuals selectively attend to information that raises their self-esteem (Augoustinos, Walker, & Donaghue, 2006, p. 32). Yaniv et al. (2010) suggest that consumers use revealed, behavioral similarity of other consumers in online shopping to assess the extent to which they share similarities of underlying preferences and tastes.

When evaluating one's abilities, an individual seeks answer for the question "Can I do X?" (Suls et al., 2000). In some situations, the individual needs someone else who is

either trying to perform or performing the activity in order to get information about his or her own capability in it. This proxy performer needs to be similar enough to the person doing the comparison for his or her prediction to be useful (Suls et al., 2000.) Festinger (1954) stated that this is because it is harder to get accurate information from one's own abilities or opinions if the target of the social comparison is too different from oneself. It makes little sense to predict one's ability to learn composing by making comparisons to Beethoven. However, if someone whom we know to share a similar background in relation to music has learned to compose, the situation is different. In this kind of situation, the social comparison theory suggests that we predict our own capability to learn this task to be similar to his or her. Festinger (1954) stated that some evaluations of one's abilities are closer to evaluating opinion. What is considered as a decent piece of music is very much subjective, and thus the feedback from other people in this kind of performance is based on opinions. There are abilities where the comparison can be made more directly between abilities. A simple example of this kind of ability would be running speed.

Opinions are somewhat different from abilities. Abilities have non-social constraints that in some cases make it impossible for one to change his or her ability. Opinions, on the other hand, are usually not restrained by non-social issues. They may be somewhat restrained because of the need of consistency of opinions and beliefs of the individual. (Festinger, 1954.)

3.3.2 The triadic model of opinion comparison and recommender systems

Suls et al. (2000) have stated in their triadic model of opinion comparisons that there are three kinds of opinion comparisons. These comparisons are related to beliefs, preference predictions or preference assessments. When comparing opinions, an individual is pondering questions like "Will I like X?", "Is X Correct?" or "Do I like X?" (Suls et al., 2002). All of these three questions reflect a different kind of an opinion comparison. "Will I like X" is related to preference prediction, "Do I like X" to preference assessment and "Is X Correct" to assessment of beliefs (Suls et al., 2000, 2002).

When an individual is trying to predict her or his preferences, she or he aims to assess her or his likely reaction to anticipated or possible situation. In a situation, where social

comparison happens in order to assess preference, an individual tries to evaluate appropriateness of his or her reaction to a certain object or a situation. When an individual tries to assess a belief, the target of the social comparison is preferred to be an expert in the domain that is under evaluation. This expert should be perceived as holding similar underlying values as the person doing the comparison. (Suls et al. 2000.)

Personalized recommendation services are sometimes criticized, because in a worst case scenario they may lead to political fragmentation: people, if they so will, can only receive material that is favored by like-minded individuals and thus avoid all exposure to articles that challenge their preexisting opinions (Garrett & Resnick, 2011). Resnick and his colleagues (1994) posed a question related to this phenomenon when introducing GroupLens, one of the first recommender systems: if their recommender system is effective at creating groups of people based on their similar interests, will it lead to fragmentation of the global village into multiple different tribes?

Comparison of opinion with like-minded individuals may strengthen it. If an individual finds out that most of the other members of a group he or she is a part of share his or her opinion, the individual tends to become highly confident regarding that opinion (Festinger, 1954). In the United States of America, media is often politically fragmented: an individual has to make choices between sources that offer either proattitudinal or counterattitudinal information due to a lack of sources that offer both. In such a setting, most individuals tend to choose the source that is in line with their attitudes and beliefs (Garrett & Resnick, 2011). This, in turn, may lead to the situation described above: the strengthening of one's opinion. Using the typology created by Suls et al. (2000, 2002), recommender systems can lead to a situation where individuals assess their beliefs only by comparing them to biased material. Garrett and Resnick (2011) also see a possibility of encouraging people to read diverse material by utilizing social comparison: they have developed an experimental program called "Balance" that gives visual feedback on users' reading habits based on the political ideology of the sources. The program was developed to encourage people to read material from diverse sources. "Balance" shows the user whether his or her reading habits are leaning towards either conservative or liberal news sites. Garrett and Resnick (2011) argue that showing

this kind of information, presented together with the average of other users' habits, may trigger the desire to catch up, if other users' reading habits are shown to be more balanced than the individual's reading history.

Content creators may also seek affirmation to their opinions from like-minded people: Hargittai, Gallo and Kane (2008) found out that widely read political bloggers linked more to blogs that shared their political views, when compared to those that were written from a different political viewpoint. Search engines and web aggregators use Internet's linked structure as a measure of relevance (Brin & Page, 1997; Meraz, 2012). Because of this, cross-linking between political blogs raises their visibility and serves to create networks that serve as a source for politically biased information (Meraz, 2012).

It should be noted that the perceived bias of the source from which material is received also affects how the material is interpreted ideologically. If the material itself lacks ideological cues but the source is perceived as biased, "the messenger" may override "the message" and the material will be seen as biased (Turner, 2007). Thus, even in situations, where ideologically diverse material is offered, people may interpret it as supporting certain ideological stance if they perceive the source of information to be biased.

As I stated before, recommendation systems may lead people to get their answers to question "Is X Correct" only from like-minded individuals. However, there is evidence that some people actively seek to get articles that come from ideologically diverse sources and value recommender systems more if they offer material from media sources perceived as conservative and liberal (Garrett & Resnick, 2011). Suls, et al. (2000, 2002) state that when individuals are trying to seek verification for their beliefs, the one's they compare them with are people who are seen to have more expertise on the subject (thus dissimilar to the individual doing the comparison), but similar in fundamental religious, political and social values. Briggs et al. (2002) found out in their study that when seeking financial advice online, factors that are influential in the decision to either accept or reject the offered advice are source credibility, personalization of the advice and predictability.

Suls, et al. (2000) argue that when an individual is trying to predict his or her preference, that is, when one is trying to get an answer to question “Will I like X ”, their target of comparison is someone who has already experienced said X , and shown consistency in their prior behavior. If the prior behavior has been similar to an individual who is trying to predict his or her preference, then the target’s evaluation of X is more likely to be used as an indicator of what one’s own reaction would be. If the prior behavior has been dissimilar to the comparer’s, target’s negative evaluation may indicate that the comparer might like the item that has been negatively evaluated. Preference prediction targeting people with similar tastes is relevant when one considers online recommender systems using collaborative filtering techniques. As stated before, they try to predict user’s preferences by comparing information about his or her prior behavior with those of others (e.g. Herlocker et al., 2000; Pennock et al. 2000). Chen (2008) found out in an experimental setting that subjects were more influenced by a recommender system using similar others as a source for recommendations than the recommendations made by the website’s owner when deciding what books to buy. The result implies that people are more willing to accept recommendations from people that are somehow similar to them. In Chen’s (2008) experiment these similar others were other customers. They had been identified by the recommender system as having similar behavioral patterns as the participant of the study. Research indicates that people are more willing to accept recommendations related to music from people sharing similar behavioral patterns with them than from the majority, if they have large enough knowledge of the specific domain of music recommendations are related to (Yaniv et al. 2010). A recent experiment by Kulkarni & Chi (2013) showed that news articles that were shown to be read by the friends of the subject in an online setting were considered more interesting than articles read by strangers. This could relate to the preference assessment that Suls et al. (2000) have discussed. Individuals may use the reading habits of their friends to evaluate what they should think of as interesting.

4 Research questions

The aim of collaborative filtering is to predict the preferences of an individual by comparing his or her behavior to the behavioral patterns of a group that shares similarities with that individual (Herlocker et al., 2000; Pennock et al., 2000).

Recommender systems that use collaborative filtering aim to achieve the same end

results as receiving recommendations from friends may lead to. For example, people ask for book recommendations from their friends, since friends are often thought to have similar interests as oneself (Sinha & Swearingen, 2001). When a recommendation can be tied to a certain individual, the receiver of the recommendation can use his or her prior information about the person making the recommendation as an aid in evaluating the recommendation. In Scoopinion, the social filtering process happens on a larger scale. Recommendations are based on the behavior of a certain group of people that the algorithm has categorized as similar to the receiver. Thus, user cannot link the recommendations they receive to any individual person.

The aim of this study is to answer two questions. First, what kind of reasons are there for the use of social filtering of news and magazine articles? Second, how do participants perceive the process of online social filtering?

Research question 1: What kind of reasons are there for the use of social filtering of news and magazine articles?

The Internet offers a nearly endless amount of material. Anyone with a possibility to access the Internet is free to search and consume media content as they wish, at least in countries where the Internet is not censored. Regardless of this, people use other individuals to navigate online. I try to gain understanding about the reasons behind the individuals' use of the other people online when selecting articles to read, even when they are given complete freedom to decide what content to consume. Research question number 1 will be addressed in chapter 6.

Research question 2: How do the participants perceive the process of online social filtering of news and magazine articles?

I argue that individuals use other people as filters for news and magazine articles in online settings. In many collaborative recommender systems, information regarding how recommendations are generated is hidden from the users (Herlocker et al. 2000). This is also the case in the Scoopinion. However, I claim that the users of these services

make sense about the underlying recommendation process on their own. I will address this latter question by answering three sub questions:

1. How do participants interact with Scoopinion's recommendation algorithm?
2. How do participants perceive articles received through online social filtering that happens in Scoopinion and in social network sites?
3. How do participants perceive sociality in Scoopinion?

By answering the first sub question, I aim to find out how the participants affect the recommendations they get from the Scoopinion by interacting with the service's algorithm.

Answering the second sub question sheds light on the how the articles that are received through online social filtering are perceived as a result of human behavior, and in the case of the Scoopinion, also as the result of a technological process of the recommendation algorithm. In Scoopinion, the human behavior is tracked and analyzed by an algorithm. Because of this, the recommendations users receive are the end result of a process that has both social and technological aspects. On social network sites, the recommendations can be linked to certain individuals, and they can be evaluated by using prior knowledge about the recommender as a social cue.

Answering the third sub question will provide information about how the sociality is perceived in Scoopinion, which is a service where it is impossible to see other users. Since the recommendations that the Scoopinion offers are based on the reading habits of the user receiving them and the behavior of other people that the user cannot see in the service, part of understanding how the process of online social filtering is perceived is to understand how these invisible others are perceived.

Sub questions number 1 and 3 are aimed specifically at the perceptions about the Scoopinion. In addition to the recommendations received through Scoopinion, sub question number 2 will also address news and article recommendations received from contacts participants have in social network sites. Recommendations received from familiar individuals offer a point of comparison to Scoopinion, where the service's

algorithm chooses the recommendations based on behavioral information that has been collected with a browser plug-in. On social network sites such as Facebook or Twitter, receiving recommendations can be tied to certain individuals. Twitter is a micro-blogging service where users can post short messages to others or to their own profile (www.twitter.com/about, consulted on April 4, 2013).

Research question number 2 will be addressed in chapter 7.

5 Research material and methods

In this chapter, I will present the research material and participants of this study. In addition, I will discuss grounded theory (Glaser & Strauss, 1967), the analysis method I used and how my analysis was conducted.

5.1 Research material and participants

The research material of this study consists of ten individual in-depth interviews. Interviews were conducted in Finnish during the summer of 2012 and they were recorded. The interview protocol was semi-structured and questions were set around certain themes. The themes that were discussed in the interviews included general media consumption of the participant, background as a user of the Scoopinion and the changes that the service has gone through (see appendix 1). The theme of service change included questions regarding the participant's perceptions about the current version of the Scoopinion in addition to questions related to the service change. The themes of the interviews were chosen because the original aim of this study was to examine how participants perceived the changes that the Scoopinion has gone through. However, when conducting my analysis, I found the research questions presented in the chapter 4 of this study more interesting than the original research question. The length of the interviews varied between 45 minutes and approximately an hour. Recordings of the interviews were transcribed. Excerpts used as examples in this work are translations from the original transcribed material. I transcribed the material personally. I also personally translated the examples taken from the interviews. Original, Finnish-language versions of the examples can be seen in appendix 3.

The participants of this study were contacted by the founders of the Scoopinon service and asked whether they would be interested in participating in a Scoopinon-related research project conducted at the Helsinki Institute for Information Technology HIIT. I was provided with e-mail addresses and names of people who had indicated their willingness to participate in the study and who had granted the Scoopinon founders permission to share their contact information with me. All of the individuals I interviewed had been Scoopinon users for at least a year and had experienced the change between the two iterations of the service. As I mentioned in the chapter where I described Scoopinon, the service abandoned social network site –elements and became a personalized recommender service. Out of the ten people interviewed, three were females. The age of the participants interviewed ranged from 25 to 34. They all lived in Helsinki metropolitan area and were native Finns. All participants either had some kind of higher education or were university students at the time of the study.

I decided not to show any personal information, such as age, about the participants in the chapters where I present extracts taken from the interviews. The reason I made this decision is that people working in Scoopinon might recognize participants based on their personal information, since they first contacted them to query about their willingness to be interviewed for the project. Thus, in order to preserve confidentiality of the interviews and the anonymity of the participants, I will present limited information about them. I will present a number which serves as an identifier of the participant next to examples in the chapters where I present the results of this study. I did not perceive any differences in the interviews related to gender groups. I analyzed the research material with the help of the Atlas.ti computer program.

It should be noted that some of the participants interviewed did not have the Scoopinon browser plug-in installed. One of them had never installed it. One had uninstalled it due to technical issues and another one had it installed in a web browser that was not used frequently. This has an effect on what data Scoopinon is able to collect from them and how the recommendations are made for them. This is because browser plug-in is necessary for tracking reading behavior of users and the Scoopinon uses this information to select recommendations for the users. If the browser plug-in is not

installed, Scoopinion only collects data based on what links users open through Scoopinion website or e-mail digest.

The interviews build an image of Scoopinion as a community that follows magazines internationally. Users tend to read online magazines that focus on technology, especially information technology, but do however react to recent “big stories” like the massacre in Aurora-theater in Colorado, USA, in 2012.

Almost every participant that I interviewed stated that they usually skim through the website of the biggest newspaper in Finland, Helsingin Sanomat, at least once a day or read the paper version of the newspaper. This affected the content they chose to read through social media services. Helsingin Sanomat was the number one source for getting information about current, widely reported issues in Finland and abroad.

Participants may have some emotional attachment to service due to the fact that they all have some kind of personal relationship with someone from the Scoopinion team. This is because most of the early users were recruited to try the service from founders’ social circles and the Scoopinion is relatively young service. It was established in 2011. It should also be noted that users in this study tend to have an overall positive attitude towards Scoopinion. It is not that surprising, since they all are long-term Scoopinion users and probably would have stopped using the service if they felt that Scoopinion does not offer anything interesting for them.

5.2 Methodological background: Grounded theory

I conducted my research by using the grounded theory approach (Glaser & Strauss, 1967). As the name of the method implies, the aim of grounded theory is to create a theory based on data. Glaser & Strauss have gone in different directions regarding how grounded theory research should be conducted since they first established the method (Hallberg, 2006). Glaser (1992) has claimed that the grounded theory method Strauss has presented in the book he co-authored with Corbin in 1990 leads to forcing of the research material in preconceived categories, which is against the original idea of the grounded theory method. In addition to the two different views Glaser and Strauss have

about grounded theory, Kathy Charmaz has established a grounded theory approach that is constructivist (Charmaz, 2006; Hallberg, 2006).

Grounded theory as a method was originally created by Barney Glaser and Anselm Strauss in 1967 to challenge the arbitrary differentiation between theory and research. They wanted to show that qualitative research can also be systematic and generate theories, and thus is a viable alternative to quantitative methods which at the time were more commonly used in research. (Charmaz, 2003, p. 84.) Glaser and Strauss (1967, p. 4) state that one of the strengths of a theory rooted in data is that it is not likely to be replaced by another theory. This is because of the close relationship between the data and the theory. The theory is derived from the data, instead of preconceptions that existed prior to the data collection. In this way the researcher can avoid forcing the data to her or his preconceptions. Rather than starting with a pre-selected theory, Strauss and Corbin (1990, p. 23) state the grounded theory's starting point as following: "one begins with an area of study and what is relevant to that area is allowed to emerge".

Originally, it was recommended that a researcher using grounded theory approach should do minimal or even non-existent literature review on the subject of interest before analysis, since it might affect the analysis process by forcing the data into preconceived categories (Charmaz, 2006, p. 6). Glaser (1992, p. 32) suggests that researchers using grounded theory should still follow this method. However, Strauss & Corbin (1990, pp. 48–51) state that prior research can be used to provide theoretical sensitivity by providing concepts and relationships that can be compared to the data. They also make a point that we bring our prior knowledge from the areas of our discipline necessarily into the analysis: no one starts doing grounded theory as a *tabula rasa*. I myself used the strategy of doing literature review after the analysis: Strauss & Corbin (1990, p. 51–52) state that earlier literature can be used after the initial finding of a category to see if research relevant to it exists, but it can also be used to confirm findings or it can be helpful for understanding findings. Glaser (1992, p. 32) states that after the initial analysis the researcher can review existing literature and relate it to his or her own work. Flick (2006, p. 58) states that even though there is still some areas that have not been researched, almost everything that can be researched relates to some earlier research.

In practice, the analysis phase of grounded theory starts with going systematically through the data and coding it line by line. Line by line coding helps the researcher to get acquainted with the collected data. After the initial line by line coding follows a second round of coding, in which the collected data is coded again in a way that results in a more organized categorization. (Charmaz, 2006, p. 11.) This is achieved by comparing prior codes with each other and generating broader concepts based on these comparisons.

Hallberg (2006) states that Glaser & Strauss never explicitly declared their epistemological standpoints. Anells (1997) argues that the original grounded theory method that Glaser and Strauss introduced in 1967 was post-positivistic. From a post-positivistic viewpoint, there exists a “real” reality to be uncovered, but it is never perfectly apprehensible. Hallberg (2006) argues that even though Strauss & Corbin (1990) never stated the philosophical perspective of their version of grounded theory, they present a post-positivistic approach. Hallberg (2006) bases her argument on a citation found in the book *Basics of Qualitative Research*, where Strauss & Corbin (1990, p. 22) state the following: “a reality that cannot actually be known, but is always interpreted”. I share this post-positivistic epistemological approach in this study.

Glaser & Strauss (1967, pp. 32–33) describe the theory created by using the grounded theory approach a “middle-range” theory. It is something that falls between “minor working hypothesis” of everyday life and the “all-inclusive” grand theories. I did not follow specifically Strauss’, Glaser’s or Charmaz’s approach to grounded theory: rather, I tried to familiarize myself to all of them and use them all in some manner to guide my research.

5.3 Analysis

When I started my research by collecting data, I had two broad research questions in mind: how do Scoopinon users use media and how did they experience the service change in Scoopinon. In addition to analyzing the interviews, I also examined the Scoopinon as a service critically. I started my analysis by open coding, as suggested by the grounded theory literature (e.g. Glaser, 1992, p. 39). After the initial line by line coding of five interviews I had 11 pages of codes. At this point I decided that it was

time to start comparing and combining codes and narrow down my research question. I identified a particular phenomenon from the data based on this open coding: receiving and accepting recommendations. It is important to note that receiving a recommendation to an article does not mean that it is automatically accepted. People make decisions on what to actually read from the material that is recommended to them. I decided to focus on receiving article recommendations received through Scoopinion, and how users perceive the recommendation process of the service's current iteration and their position in it. I also used material related to receiving recommendations through social network sites to complement the analysis. By doing this, I was able to compare the social filtering that happens through the Scoopinion to that which takes place in the social network sites. However, it has to be noted that in the context of this study, I focused purely on the recommendations that were received through these services. In the context of this study, social network sites are just another social recommender service.

After I selected a more specific topic of research, I started to go through the research material again, selecting larger instances than simple lines. I labeled these instances under "receiving recommendations in social network sites". After this round of categorizing, I went through these instances, doing another set of open coding, proceeding again line by line. After this round of analysis, I did a round of analysis in which I coded instances under the label "receiving recommendations through Scoopinion". After this, I did a round of open, line by line coding for these instances. I then categorized these codes under broader categories. The results of this round of analysis became the backbone of my research. There were less instances where participants spoke about recommendations received through social network sites compared to those where recommendations made by the Scoopinion were mentioned. When combined, the open coding I conducted to all instances that I labeled under the above mentioned categories yielded approximately 290 codes. I then started to compare these codes with each other in order to reach more systematic categorization of the phenomenon I was examining. Great amount of codes overlapped with each other's and basically meant the same thing. All codes did not relate to the research questions of this study. Tables 1 and 2 show how the codes were categorized. The list of the codes used is shown in appendix 2.

Table 1

The amount of codes in each category of different reasons for the use of online social filtering (N=63).

Category	Accessing unknown content	Averting information overload	Killing time
Amount of codes	31	26	6

Table 2

The amount of codes in the each category of how the online social filtering process is perceived (N=159).

Category	Interaction with the algorithm	Perceptions about the articles received through online social filtering	Relationship between the recommendation and the recommender	Sociality in the Scoopinion
Amount of codes	19	64	35	41

The results of my study are based on this categorization and will be presented in the chapters 6 and 7.

Since Scoopinion does not show from which individual the recommendations are from, unlike Facebook or Twitter, it was helpful to use the research material related to the use of these two social network sites as a point of comparison. Based on my analysis, I formed a core category that was labeled as “Receiving recommendations through online social filtering”. Strauss & Corbin (1990, p. 116) state that the core category is “the central phenomenon around which all the other categories are integrated”.

The decision to choose the particular phenomenon of receiving recommendations through social filtering was based on the research material. The codes and instances I discovered with my analysis suggested that this phenomenon would be worth of a closer inspection. Participants talked about other users of Scoopinion and how they are necessary for generating the recommendations, even though there is no way of seeing

other users of the service through the user interface of the Scoopinion. At the beginning of my study, I thought that I would focus on how the participants experienced the change that Scoopinion has gone through. However, when conducting grounded theory research, it is possible to end up with focusing on something that was not considered central at the beginning of the research process. By coding the research material, the phenomenon of receiving recommendations through social filtering emerged.

The main focus of my study is how people perceive the process of online social filtering of news and articles. In addition to this, I examined the reasons behind the use of social filtering. I focused on this after analyzing the incidents where participants spoke about receiving recommendations. My results have an emphasis on the online social filtering that happens through the Scoopinion, since my research material consisted of interviews I conducted to its users, and I mostly asked the participants questions that were related to Scoopinion. Since Scoopinion is a collaborative recommender system, users' perceptions about the recommendations they get from Scoopinion are central for understanding their assumptions about the service: it is used to receive these recommendations. However, I felt that only analyzing material related to Scoopinion would have been insufficient, since every user stated that Scoopinion is not their only source for news or magazine articles. I argue that recommendations received through different sites need to be considered as a part of a bigger whole, in which user's media consumption routines have to be taken into account. Recommendations received through online social filtering have their own role in these routines. Most of the questions I asked when conducting the interviews were about Scoopinion, so most of the interview material I have is somehow related to the service.

In the interviews, the most commonly mentioned social network sites were Facebook and Twitter. When participants spoke about recommendations received through social network sites, they usually referred to one or both of these services. Research material also contained incidents where the subjects talked about the older version of Scoopinion, which was more focused on social networking. In the past, it was possible to see what your friends had read: Scoopinion collected reading data with a web browser plug-in and published it on the user's profile page. Incidents where subjects talked about browsing the reading habits of other people in Scoopinion were also

included in this study, even though this kind of automated sharing is different than that which happens in Facebook or Twitter. However, users of the older version of Scoopinion were aware of the way it published data about their reading behavior for others to see, so that they were publishing it willingly to others. Participants stated that they mainly used the earlier version of the Scoopinion to receive article recommendations and considered the service mainly as a source for them.

Scoopinion is now a personalized recommender service instead of a social network site. Articles that the service recommends cannot be linked to any individual person. In this situation, it is the algorithm that suggests material to users based on the data it collects from them. The algorithm needs behavioral data from users in order to function. The users interviewed understood that without this information the algorithm would not be able to make recommendations.

On social network sites, recommendations that the participants received were usually published in feeds that were visible to multiple other users of the service. Thus, recommendations received through social network sites were not usually personalized. In the current version of the Scoopinion only some of the recommendations available are personalized. Users can see also articles that are most read by everyone using the service on the Scoopinion website.

6 Reasons for the use of online social filtering

The research material that I collected shows that the participants have similar reasons to use social network sites such as the Facebook and the collaborative filtering recommender system Scoopinion as sources for news and article recommendations. However, it has to be noted that social network sites are used for a plethora of other activities too. Scoopinion, on the other hand, at the time of the interviews, could not be used for any other functions than gaining access to articles provided by its algorithm. So when one logs into Facebook, there are many other possible reasons for this than receiving article recommendations. In the case of Scoopinion, there are not, at least not any other reasons that would be obvious. In this chapter, I will present my findings related to the reasons for the use of online social filtering. I have categorized these

reasons for the use of social filtering into three classes: gaining access to content outside of one's routines, averting information overload and 'killing time', which refers to entertaining oneself at times when one has nothing else to do.

6.1 Accessing unknown content

To what kind content do people want to gain access through social filtering? The extract below is one example of what the participants of this study wished to gain by using online social filtering.

[Through social media] It's possible to find smaller, more specialized blocks that I have not stumbled upon before or that I don't visit so often. (002)

In the extract above, the interviewee is talking about receiving recommendations to articles that are somehow outside his normal routines of Internet browsing, or at least outside the routines that do not include social media services. Only one of the interviewees stated that he gets most of the articles he reads online through social media. This participant used social media as an umbrella term for social network sites and recommendation services such as the Scoopinion. For others, this kind of social media was one source among others, such as the homepages of magazines or newspapers. Contacts that people have in social network sites enable them to find content that they were not actively looking for. The information that users receive through online social filtering that happens in different services is still deemed as worthy of reading, even though there necessarily are not any prior need of information that it answers to. The material that others stumble upon and decide to share supplements the routines that the receiver of these recommendations has. Same kind of reasoning was behind Scoopinion-usage:

I mainly look for news that I don't see elsewhere. There are these top-news that are often something that is related to technology and they are things that interest me, but I don't visit that kind [technology] sites, so I get that kind of information from there [Scoopinion]. (007)

In the above extract, there is a more specific area of interest that narrows down what the participant expects to gain through filtering. However, it is broad enough for

Scoopinion to be of use, and the user has prior experience about using the service as a tool for gaining access to such technology-centered topics. The participant knows that he can find content from the Scoopinion site related to this, even if his personalized recommendations would not include material that is related to technology. Scoopinion offers a window to articles that are from sources outside of one's routines. By doing this, it complements these routines:

Maybe it adds to those [sources] that would be looked at otherwise, those things that you are used to look through, like there is this at this magazine that you don't usually read, but this is an interesting story. (004)

Another user, when asked what she ends up reading through Scoopinion, answered that:

For some reason I end up really often to Suomen Kuvalehti [Finnish magazine for feature-articles] or to English-language sites that I don't follow otherwise. I very seldom end up to Helsingin Sanomat [Finnish newspaper] or Yle [Finnish broadcasting company], it pretty much never happens. (010)

Earlier in the interview, this user had stated that she follows both Helsingin Sanomat and Yle actively. So if these sites contain something that is of interest to her, she is likely to have already read it as part of her routines. Scoopinion works as an entity that follows magazines that she does not and offers her material from these magazines. She could follow these magazines without using Scoopinion as a medium, but this would require added effort. The interviews indicate that people have certain online magazines or news-sites that they follow actively, because they offer relevant material to them constantly.

At this point it is important to consider a large difference between using social network sites as a source for article recommendations and using dedicated services like Scoopinion for the same purpose. With social network sites, there is a plethora of possible reasons why one would wander into the site. With services like Scoopinion, the reason tends to be that the user wants to read *something*. Internet is full of different magazines and newspapers. Scoopinion offers a more manageable selection of reading material from a large variety of different magazines. Also, the layout is simple, as one

participant said: “[Scoopinion has gone] to more designed direction, where all kinds of gadgets and extra options are hidden, where it has been thought so far so there is no need to dig more by yourself” (003). From the recommendations she or he receives, the user *chooses* what she or he reads. But he or she probably will read *something*. The user has no other reason to enter the site or open the e-mail digest than to receive recommendations for articles. One user said the following about the e-mail digest: “If you are in a hurry, you don’t have to react to it in anyway: you can go through it a week later if you wish” (001). You can go through the digest at a time when you are going to read something out of it.

One user described how he sees the material that he reads from Scoopinion in the following way:

I get the important stuff from other sources before I glaze through this [Scoopinion], since Scoopinion is like this: it offers potentially interesting stuff and I go through it in a kind of a half-serious mindset, since it does not really matter that much. (004)

This kind of theme goes through all of the interviews. Scoopinion offers something more, something that adds to other media usage routines. The service’s strength was described multiple times as a possibility to find something that would have not been found otherwise. Scoopinion was seen to offer material that users were not looking for. But Scoopinion was not described as the main source of important content. Scoopinion supplements other routines, but cannot replace them. It is not highly useful if there is a specific need of information.

6.2 Averting information overload

The recommendations we get through social network sites and dedicated recommendation services are filtered for us: they are picked from the Internet, which contains a seemingly endless amount of material. Online social filtering narrows down the amount of media items from which to choose from. Recommendations bring something more to us, but on the other hand they also present a limited amount of items

from which to choose. When asked about his media consumption, one participant made the following statement:

I'm pretty passive at it, if you think like media like news and such, it's more like so that others do the work, if some things rise in Facebook I'll look from there. It somehow feels like there isn't enough time for me to go and scour by myself. (005)

This participant considers time as a limited resource, so he trusts his social network to deliver him media content through Facebook. Later the same person mentions that "*Content has to be somehow filtered for me before I read it*". This can be seen as a method of evading the possible information overload when an individual hopes to find content that is of good quality. When someone else has already deemed an article meaningful and interesting, it is not necessary to go through the ordeal of searching for meaningful content independently. One participant said the following:

Many individuals are interested in efficient use of time and other quality [refers to the quality of different services], and it [Scoopinion] offers good things for many considering these things. (006)

The algorithm works for the user: it saves time by releasing users to do other things than scouring through magazines in search for something to read.

In Scoopinion, relevancy is measured by the time spent reading something. Scoopinion's algorithm is designed with an assumption that people read interesting articles for a longer time than they would read less interesting material. Users participate in filtering content by reading. Their behavior when accessing an article is translated into a measure of quality. When asked how he would describe Scoopinion's strengths, one interviewee answered:

That filtering way of looking it, there's a huge amount of information and news-stream, that someone does something little for you, filters and recommends good articles to you. (006)

In this extract, the participant tells that Scoopinion brings value by filtering content from “a huge amount of information and news-stream”. It is valuable in itself that someone does something to help people manage the stream of online news content. By filtering content, Scoopinion limits the amount of articles where the individual chooses from. It would be nigh impossible for one individual to scour through Scoopinion’s growing list of whitelisted sites on an everyday basis. Part of the information contained in these sites is packed into a more manageable form by the Scoopinion. Following Scoopinion was deemed easier than trying to follow a large amount of different sites. At any given time, there is a vast amount of articles posted to different sites on the Internet. The stream-metaphor depicts just this: it never stops. One user described the situation in the following way:

I have somehow established, it is somehow related to that stream-metaphor, that either you have to be constantly on guard so that you don’t miss anything, or you can take the attitude that, yeah, there is constantly material going and I then use filters through which the most important stuff ends up to me. (003)

The participant states that the flow is endless, but that it can be managed by using something to filter the stream. In order for this arrangement to work, one has to trust that the most important material actually comes to them through these filters. Users evaluate these filters. If a user thinks that a filter is not doing an adequate job, she or he may stop using it:

I just stopped ordering a newsletter of one magazine. They have good stories, but the newsletter is terrible. Articles that were distributed from there to me did not fit at all to my [tastes], so I just decided that I’ll sometimes visit the magazine’s website and check certain news that are under a certain category. (006)

People who receive recommendations do not passively accept them passively. If the recommendations are constantly uninteresting, then the filter is not working as it should be. This may lead to a situation, where an individual quits using the filter. On social network sites such as Facebook, the content is also evaluated:

The links circulating on Facebook are for large part completely irrelevant news, like something along these kinds of lines: boy caught a fish, it was big. It is like my life goes to waste if I click them open. (009)

For this user, most of the recommendations that come through Facebook are of no interest. The participant does not stop using the service, since there are other reasons for the use of Facebook than receiving recommendations. Instead, the interviewee just does not accept the recommendations by deciding not to read them. Again, time is spoken of as a limited resource, in this case it is seen as wasted if used to read content considered as irrelevant.

A tool for filtering content would not be much of use, if it actually made reaching content harder. One of the things participants mentioned as a reason to use Scoopinion was that it does not require much from the user: *“You don’t need to do pretty much anything; the recommendations start to come anyway”* (008). Since Scoopinion uses information about users’ reading habits to generate recommendations, users communicate their preferences to the service by reading. They would read anyway, so there is no need to see any extra effort in order to start receiving recommendations. The ease of receiving recommendations was especially apparent among the participants that mainly read the e-mail digest that the Scoopinion offers. The e-mail digest is easy to incorporate into existing routines:

The digest clearly increased it [use of Scoopinion] -- Messaging with friends has moved to Facebook, stuff that would have been earlier put on a mail-list created between friends, but for me it has clearly increased the use of these kinds of catch up –e-mail-services. Instead of opening a page in a browser and going there to check some aggregation, it is pushed for me as an e-mail -- I take my phone in the morning and check my emails with it, since it’s easier than logging into something or using a million different programs. (003)

The participant states that e-mail digest offers a way to easily access recommendations that the Scoopinion offers in addition to other services he uses. The ability to concentrate information gained from multiple sources to the e-mail makes it easier to follow different channels that offer pre-filtered content.

6.3 'Killing time'

Some of the reasons to use Scoopinion were linked to situations when the participants had nothing else to do. One user gave the following reason to visit Scoopinion's website, since she usually only reads the news digest:

I usually visit the site if I'm somehow exceptionally bored. When I was sick for a week and wanted something to read, I went to the Scoopinion website and started looking for stories from there. (010)

Boredom and use of Scoopinion were also related to situations like sitting in public transportation, as described in the following excerpt:

When travelling by the bus, for example to school, I tend to go through all of them [recommendations received through the e-mail digest] with my cellphone. I tend to read a lot with cellphone. (005)

Public transportation is a confined space. Mobile phones with Internet access have offered a way to pass time in them: similarly as reading a newspaper or a book. It is discouraged by norms to start conversations with strangers in Finnish public transportation, so options for spending time are usually narrowed to things that one can do alone without bothering other travellers. Another participant stated that "*I mainly use Facebook with my cellphone because I use it always when travelling by bus, so it is my entertainment on those occasions*" (010). The same participant spoke about her Scoopinion-usage by mentioning that:

I usually look at Scoopinion only in the evenings because there is usually material that I really want to read, but I cannot look at that during the day since I'm working and by doing this I would eat my own work time. (010)

The use of Scoopinion was tied to spare time or to the moments when the participants were bored or were waiting for something, such as for the bus they had taken to arrive at their destination. It was not unanimous across the interviews that Scoopinion was suitable for mobile use. Some users stated that the articles it offered were too long to be read comfortably from a screen of a mobile phone. One user said that "*if there is some*

really long article, I preferably read it in printed form or from iPad” (002). So the tools that are available for reading in any given situation also affect what is considered as suitable material to spend time with. Some users were happy to go through the recommendations with smaller screens, but for others this was uncomfortable.

7 Perceptions of the online social filtering process

Scoopinion is automated. The algorithm generates recommendations by itself and does not need constant supervision from the Scoopinion staff. However, the service still needs humans. The recommendation algorithm is written by humans, the service needs users in order to be relevant and the behavioral data of the users is essential for the functioning of the recommender algorithm. People also choose the sites that the algorithm picks recommended articles from. Someone needs to be the first reader among Scoopinion users: the service does not recommend material that no one reads. In addition to these issues, in this chapter I will also discuss how the articles received through social filtering are perceived by the receivers and how the sociality in the Scoopinion is perceived.

Users I interviewed discussed Scoopinion from different angles. They spoke about the role of users and the effect that their behavior has on Scoopinion’s recommendations. On the other hand, they distinguished some parts of the recommendation process as a separate entity from the users. These parts could be labeled as the algorithmic black box, referring to the way that the collected behavioral data is processed by the algorithm.

7.1 Interaction between Scoopinion users and the recommendation algorithm

Scoopinion is a recommender system based on collaborative filtering. As such, it is dependent on the data provided by its users. The way Scoopinion creates ratings is implicit: it follows the behavior of its users, if they have the browser plug-in installed. The service does not provide the possibility to rate articles manually.

7.1.1 Whitelist as a result of interaction

It aggregates lists of recommendations from content created by others with its own algorithm.. It still [a comparison to the earlier version of Scoopinon] measures how long you are on a [web]page. (002)

In the excerpt above, participant says that for an article to be taken into account it has to be first published online. Scoopinon does not create the content it recommends. Stories have to be published before they can reach a reading audience. After this, Scoopinon user has to read an article in order for it to be taken into account by the recommender algorithm. Even though this may seem fairly obvious, it is important to note, because one of the social aspects of the service is that users can make suggestions for the Scoopinon's staff about which webpages they could include to their whitelist. In the end, it is the Scoopinon staff that makes the decision to include or not to include some magazines. As I have mentioned before, Scoopinon has a list of sites where the browser plug-in collects behavioral information. This list is called the whitelist. Because of this, the page where the article is published matters. Even though the list of whitelisted sites is expanding constantly, it will never include *everything*. It would be impossible for the Scoopinon staff to be familiar with every web-magazine in existence. So users, by suggesting, and the staff, by accepting or declining these suggestions, work in collaboration and *filter content for the algorithm to filter*. In other words, the first way of limiting what content ends up in the recommendations is the whitelist, which is maintained manually. The users of the Scoopinon have opinions about what magazines the recommendations should be picked from:

At the beginning there was a lot of that, the whitelist that Scoopinon looks through [to find content] was too narrow, I probably proposed at least ten different sites to be added to it because of that. (009)

In the excerpt above, an interviewee describes a discrepancy that existed between what she thought as relevant sources for news and articles and the list of sites that Scoopinon considered relevant for its algorithm to follow users' behavior on. Later in the interview, the participant states that it has been a while since she felt it necessary to suggest a magazine to the whitelist: the relevancy discrepancy has balanced out. However, she states that "*the feeling that this is missing from here [the whitelist] comes*

very seldom anymore” which indicates that if the discrepancy between her opinion about relevant sources and Scoopinion’s whitelist resurfaces, she will take action to suggest adding pages to said list again.

Another user wished that Scoopinion would offer her French-language recommendations. Later on in the interview she stated that she had done something in order to make it at least possible: “*I once went to add some pages there, some French-language sites*”(010). By saying there, she meant that she visited the Scoopinion website in order to make a suggestion about adding pages to the whitelist. This user perceived discrepancy between what she wished to receive from the service and what the service *could* offer. Adding sites to the whitelist did not affect the recommendations she received from the service, because this user did not have the browser plug-in installed. If a user of the Scoopinion does not install the browser plug-in, Scoopinion can only monitor what articles user opens from the e-mail digest or from the Scoopinion website. Because of this, the suggested French-language sites would only have affected user’s recommendations if Scoopinion would have recommended articles from them. However, it affected the *possibility* of receiving recommendations that are written in French.

Requesting for a website to be added to Scoopinion’s whitelist can be looked at from different viewpoints. It creates a possibility for a recommendation to originate from the proposed site. On the other hand, it also enables the algorithm to use behavioral data collected from the user at the proposed site to define what kind of reader he or she is. This way the expanding whitelist may help the user to get recommendations that are more suited to her or his tastes. Recommending sites to the list also gives the user a sense of contributing.

7.1.2 Reading as interacting

The interaction of users and the algorithm is certainly not limited to making suggestions to the whitelist. Scoopinion collects behavioral data from users in order to make recommendations for them and others who share similar reading patterns. If the Scoopinion browser plug-in has been installed, it is apparent that most of the interaction with the algorithm happens through the data that the service collects. However, the

exact influence of individual's own reading behavior and the amount of information Scoopinion has about it seems to be a bit of a mystery:

I'm wondering how much data about my reading habits is in there [Scoopinion] – – it looks what I have read and on the other hand what has been looked on the general level. (001)

If the user has the browser plug-in installed, he or she interacts with the algorithm of the service also when reading articles that have not been reached through Scoopinion. Interaction starts when a user enters a whitelisted site. How he or she behaves on the site is translated by the algorithm into ratings. This does not mean that the articles that the user has thought as most interesting or entertaining have more weight when the service suggests recommendations. The service measures mainly time spend on a whitelisted site.

At the time of the interviews, users had access to the data Scoopinion collects from them, but there were no means for them to see how the data influences their recommendations. Data was also given in a raw form, so a user would have had to make an effort in order to find what she or he wanted to know. By raw form, I mean that the information was available as numbers. The lack of clear visual information about what data Scoopinion has about the users was one of the reasons why the recommendation process was not clear to the participants. One participant thought that giving visual information about individual's own behavioral data might help the users to gain a better understanding about how the collected information affects the recommendations. If the collected information would be visible, the user could at least see what acts as the input from which the algorithm tries to deduce preferences of the user.

One interviewee, who did not have the browser plug-in installed, stated that she had tried to affect the recommendations by avoiding clicking on content in the news digest that originates from certain sources:

For example, if I get some story from Ilta-Sanomat [Finnish tabloid], I have left it unopened intentionally, because I don't want to start receiving more of them.

One story now and then from Ilta-Sanomat is okay, but I do not want to get ten stories from it [recommendations in the Scoopinon digest]. (010)

Since Scoopinon does not offer any explicit rating scales and it monitors what links are opened through the digest, the only control that the participant could exert over the recommendations was signaling preferences to the algorithm by accessing certain articles while leaving others unopened.

Since the users interact with the algorithm by reading, how do they describe what they read? There were parts in the interviews where media consumption was explained as something that relates to an individual's identity. Two extracts below illustrate this when interviewees spoke about their personal reading habits:

I'm a former Amnesty-active and there may be certain human rights issues that are not reported anywhere else than in certain medias. (001)

In the extract above participant brings up her past as an active in a human rights organization. The participant uses this information to explain what kind of topics she follows in the media. She states that some of the information she regards important is not covered by the mainstream media. There is a link between the material she routinely reads and how she describes herself: as a former Amnesty-active, she reads about human rights issues that are not reported widely. The following extract was a more typical way of explaining what one reads by linking it to identity.

Interviewer: Do you follow certain areas in the media?

Respondent: Yeah, more about culture and economy -- And then stuff related to my occupation, information technology, social media, marketing, that sort of stuff. (008)

In this extract, the participant says that he reads material he considers relevant to his occupation. Topics that somehow relate to his profession were explained separately from those that did not. There is a connection between the participant's occupation and some of the topics he tends to follow. In both extracts that I have presented here the participants build a connection between their reading behavior and some part of their

identity: I read this kind of material, because I am like this. Reading behavior is explained by mentioning some role that relates to the followed topics.

The reading behavior of others was linked to their inner world. When a participant was speaking about the differences of automatically sharing information about music listening and reading habits, he stated the following:

It probably depends on the person, if it is more personal to share what kind of music you listen than what news you read. I don't know if you can say that Mikro-pc [Finnish computer related magazine] is news, but it already tells that you are interested about information technology. (003)

The participant states that it is possible to make assumptions about the interests of someone based on what he or she reads. This is not always necessarily the case. As some subjects stated, the automated sharing does not offer context for the material that has been read. Not everything we read is equally important to us, but we believe that others make assumptions about us based on our reading behavior. Scoopinon certainly does, since it tries to predict user's preferences based on his or her reading behavior. One participant who did not like the automatic sharing feature of the former Scoopinon iteration said that *"What if I go and mistakenly click myself to some boob-site and then someone goes to see those stats of mine, and looks and is like, oh, she reads that kind of stuff"* (009). Other Scoopinon user said this in the interview when asked why he did not like the automated sharing feature:

I don't go and yell in a tram when reading a newspaper that I read five minutes this stupid story and two minutes this important one that is about municipal politics. (002)

News and articles do not have equal value to us. Note the word "important" in the extract above. If the sharing process is automated, we have limited power over what we share: we do not share just the stories that we think as important, but everything we read. There is, of course possibilities to avert this situation. An individual can stop using a service that shares their behavioral information automatically. The browser plug-in of the Scoopinon can be turned off. When sharing something for example on Facebook,

there is some reason behind the act of sharing. Reason why something is considered worth sharing is not always the same, but there probably is some reason behind the act.

Participants who had the browser plug-in installed reported that they were no longer concerned about the Scoopinion's way of collecting data. Some of them said they had been during the earlier version, but it was because the service automatically published information it collected about their reading habits.

Even though the users of Scoopinion may think that everything they read is not equally important, everything they read affects the recommendations that the Scoopinion offers if they have the browser plug-in installed. According to the CEO of Scoopinion, the service gets sometimes feedback from the users that do not like some of the recommendations they get, because they feel like the personalized recommendations give an erroneous impression about them (Koskinen, 2013). However, Scoopinion cannot distinguish between what an individual thinks as important and what merely as interesting at given time. People can read material about variety of topics, but even though the behavior is the same, the meaning given to it is not. An individual can spend lots of time reading celebrity gossip, but that does not mean that he or she would think that they are more important than articles about some humanitarian crisis.

There are moments when people end up reading a lot of material on something that momentarily piques their interest. These kinds of reading rampages do not necessarily hold any higher value for them. However, situations like this can lead to false assumptions about the reader if the information is shared publicly, as the following extract illustrates:

If someone reads a lot about some illness, you might make an assumption, that does he or she have that illness or does someone of his or her family have it.
(006)

In the fictional situation participant envisions in the extract, it could be that the reader has the illness he or she has read about. The assumption made based on his or her reading habits might be true or not, but it is impossible to confirm this through the shared data. In any case, people make assumptions based on the information available to

them and are also aware that other people make assumptions about them, based on the information they share.

7.2 Perceptions of the articles received through online social filtering

In this chapter, I will first discuss the participants' perceptions about how the recommended articles are chosen in the Scoopinion by the service's algorithm. After this, I will present my findings on how information about the sharer of an article influences the perceptions about the shared content.

7.2.1 Perceptions of Scoopinion's recommendations

Participants often stated that they do not know how Scoopinion works. They were aware that it tracks behavior in certain whitelisted sites, but they also brought up that the underlying processes of the recommendation system were not visible to users. One user said, when compared to former iteration of the service, that *"It is a bit harder to understand what parameters there are behind everything: there is just the page where news end up in and that's it"* (004). The process had felt somehow clearer when the site showed statistics about the data it collects. When statistics about their reading behavior were shown, the users were able to see for themselves a glimpse of the algorithm's input that originated from their reading behavior.

Users were aware that Scoopinion tracks reading behavior with a browser extension. Users also have access to recommendations that are pushed to them by the algorithm. However, they cannot see what happens in the algorithmic black box, that is, how the algorithm turns user behavior into numbers and makes calculations based on them. One interviewee described the situation in the following way: *"it's not exactly clear how Scoopinion works, there's magic in the background"* (003). Comparing algorithm to magic is an interesting way to describe it. There is some mystical process that has a certain outcome, but the audience cannot see what causes that outcome. The audience may try and guess how the trick is performed, but they cannot be sure, even if they would deduce the process correctly. They cannot confirm if their guess is correct.

Users were aware that Scoopinion has an emphasis on recommending articles that were perceived as "longer". There were no explicit explanations about what exactly the

length of these “longer articles” is or what their length is compared to. It was also noted that the service tends to filter out so called “click-baits”. These “click-baits” were described as articles that have interesting headlines, but the whole story itself is deemed as uninteresting or unimportant. This filtering out “the trash” was linked to how the recommendations were evaluated by the algorithm. A common way to describe Scoopinion’s recommendation system across the interviews was that it offers articles that people *have actually read*. Scoopinion also markets itself this way. The Scoopinion users I interviewed often compared Scoopinion’s way of using reading behavior to rank articles to widely used practice of counting how many times an article has been opened. When asked how he would explain Scoopinion to someone who does not have any prior information about the service, one of the interviewees gave the following answer:

I would probably explain how it moves from that amount of clicks [article has] generated to what people actually read, so it is a service that recommends good-quality articles from all over the world to the user. (005)

In the extract above, the user speaks of Scoopinion’s algorithm as a step forward. The recommendations are better, because they are based on more accurate data about behavior. Assumptions about behavioral data underlying the recommendations become *a part* of them: articles that are offered through Scoopinion are recommended because they have been read. Articles do not end up in the recommendations because they are good. They end up there because they have been read, even though quality and reading time may have a connection. Behavioral data that Scoopinion collects is one way of measuring relevancy of an article, but it certainly is not the only one. For example, there is also the aforementioned way of measuring click amounts. One user who did not use the Scoopinion browser plug-in said that “*Scoopinion could add some kind of rating system, like was article good or not, so it would not be necessary to use that plug-in to affect it [Scoopinion’s recommendations]*” (010). As she said, there could also be a more explicit way of telling Scoopinion about one’s preferences.

Maybe you could describe it [Scoopinion] like this; it chooses recommendations based on what others read and how much they [articles] have been read, but also how long they have been read. It is not enough to just look the headline, so it is a little bit more trustworthy. (008)

In this excerpt, the interviewee describes how the recommendations are picked up by the algorithm based on the data collected from other users. Scoopinion's model of following behavior was compared to the act of simply opening a web-based article. By describing the Scoopinion's recommendation system as "a little bit more trustworthy", the user makes a statement that more *accurate* quantified data about behavior leads to recommendations that are somehow a more trustworthy representation of people's choices when it comes to reading articles. This may very well be the case, but Scoopinion still only collects information about how long something has been read. It does not ask if users have liked what they have read. It is not even certain, if the data that the algorithm of Scoopinion uses to pick up recommendations is actually information about reading behavior. Scoopinion tries to measure time spent reading by relying on information that can be collected through a web browser. However, Scoopinion does not have access to the user and it cannot tell if the user is reading the text that is on her or his computer's screen.

Users cannot monitor what information Scoopinion collects from them unless they have a certain amount of technical knowledge. Even if they possess the expertise required to monitor the browser plug-in, they cannot be sure that the same information that is collected from them is also collected from other users. They need to trust that Scoopinion does what they think it does, and what they think it does has an effect on what they think they *get*. The data that Scoopinion collects, or is at least thought to collect, is interpreted as a measure of *interest*. Quantified data is qualified to mean something. Collected data becomes more than just numbers: evaluations about the interestingness of content.

In a way, you can pretty much trust that work-related big issues can be found through Facebook and Twitter networks and from Scoopinion and other aggregate services like it. (003)

It is not that Scoopinion would not offer material that users consider important. It just cannot answer to all informational needs that users have regarding media all by itself. One interviewee said that no one follows just one media-source. Scoopinion can add something to existing routines and networks, but the lack of control that users have over the recommendations means that even though people get to decide what they read

through Scoopinion, they do not have any direct tools with which to affect what kind of articles the service offers them. Scoopinion's algorithm tries to guess what kind of material would be of interest to the user. However, algorithms are not omnipotent and even though they can collect astonishing amounts of behavioral data about those whose behavior they track, it does not mean that they can predict what people want at any given time. One participant said that *"no one, not even Facebook has invented this kind of universal-feed that holds all important things in the world"* (008). When recommendations are combined with other media sources, users can be more assured about not missing something that they consider important. They also gain the possibility of finding new material that related to topics they are interested in. If the important material is something that tends to come through other channels, Scoopinion may act as a source for something that is related to them. If Scoopinion is used to add something to topics that currently are of interest to user, user has to scour through Scoopinion's recommendations without the help of the algorithm. In this case, the user of the Scoopinion filters by himself or herself recommendations that the algorithm has filtered for them. When I asked one user about whether she often ends up reading material outside topics that usually interest her, she stated that *"Well, I have to say that I don't, not very often but I end up reading from sources that I otherwise wouldn't"* (010).

It was stated multiple times that the Scoopinion is not good for following so called breaking news. It can, however, offer longer, more in-depth analysis of current, widely reported issues:

It doesn't necessarily offer interesting news to everyone, but then again it offers quite a lot of articles that are interesting to everyone. (007)

The interviewee remarks that the service does not necessarily offer material that is interesting to everyone. The algorithm is not able to perfectly predict the interests of different individuals. However, the service offers articles that are generally interesting, according to the participant. When asked to describe what these articles that interest everyone are like, the subject continues:

Every big news-story, of course. For example, there was that shooting in that Batman-premiere and then quite a lot of people are probably interested in new

phones and gadgets like that -- and in Finland ice-hockey is probably interesting. It does not offer that much of it, except if the world championships are on. But mainly those kind of big news are something that everyone is interested in. (007)

These kinds of big news are not only read widely, but they are also reported widely, across different media outlets. If they are handled in some way across different magazines competing about reader attention, it is not surprising that they are pushed in to feeds of the aggregate services that rely on delivering content that is reported in these magazines. Scoopinion reacts to these events because readers react to them. The reason that Scoopinion is not the best service to get these kind of big news at first hand is that first reports are often a shorter type of news, instead of long, in-depth analytical articles and because it takes time for people to read news: without a certain amount of readers an article cannot end up into Scoopinion's recommendations.

7.2.2 Relationship between the recommendation and the recommender

Recommendations received through the Scoopinion do not show any information about the individuals who have read them. Since the reading time is converted into ratings by the Scoopinion's algorithm, users that receive the recommendations may assume that there are people who have thought that the recommended material is interesting.

However, they do not know who has found the recommended articles interesting. Social network sites such as Facebook and Twitter offer more visible social information when a media item such as a magazine article is shared on them. Users can see who in their social network has shared the article. They can also see other people's actions, such as commenting, towards the shared item. In this sense they have more social cues to evaluate articles when compared to the Scoopinion.

When asked about their decision to actually open a link to an article that is shared on social network site, participants usually stated that they base their decision to open the article on its headline. However, this was not always stated as the only reason for opening an article. Sometimes it mattered who shared the article:

[Open links to articles shared] pretty seldom from Facebook, there's really large amount of these kind of nonsense entertainment articles from tabloids that don't

require opening – – I have a couple of friends that share really a lot of articles regarding the current economic situation, which I wouldn't read otherwise, but which I gladly read when they are offered to me through Facebook and it's because these people are economically-oriented because of their occupation so they share these smart articles and also usually comment on them. (009)

This participant said that the individuals she mentioned have expertise in economics due to their occupation. Due to the occupations the sharers are in, the individuals in question have earned a status of an expert in the eyes of the participant. When the mentioned individuals share something regarding to economics, the subject bases her evaluation of the shared article not only on the title, but also on her prior knowledge about the sharer.

Another noteworthy thing is that this kind of content sharing is mentioned to happen frequently. The participant has prior knowledge not only about the sharer's expertise in the area, but also about past sharing practices of the people in question. This relates to Scoopinion also: since participants were pleased with the recommendations it provided in the past, they continued to use it. In the Scoopinion it is impossible to pinpoint recommendations to any certain individuals. Because of this, the quality of the recommendations that the service offers is perceived as more dependent on the algorithm's functionality, rather than on the of the individuals reading the stories

The sharer's act of commenting the article gives context to the article for a non-expert. Commenting defines the sharer's stance towards the article, which he or she in the case of the prior extract gives from the position of an expert. Commenting can give the article different meaning compared to the original: for example, comment might be a negative one, one that might even question the validity of the shared article. Commenting is also something that proves that the commenter has at least paid some attention to the commented article. One of the interviewees said the following:

If someone you barely know has commented something it may mean that the story is somewhat interesting – – Someone has actually bothered to form some kind of opinion about the story and even type about it with his or her keyboard. (004)

The participant makes a point that commenting is active behavior: it requires that the commenter has read and paid attention to the content of the commented article. After this he or she has made an effort not only to share the article, but to form and share his or her opinion about it. So the commenter has to go through at least some effort to make some kind of a statement that is related to the article. This statement, the comment, is yet another cue that indicates the importance of the shared article.

Another participant spoke about Scoopinion's former feature, the automatic sharing of reading behavior in the following way:

I knew that, well he is a good example [pointing to a screenshot of a Scoopinion profile page], I know he is a great programmer and reads, I follow him on Twitter also, he reads certain kind of material, so the person functions as a kind of a filter, I could go and see what he has read. But it required that I knew the person in question closely. (006)

In the excerpt above, the participant speaks about visiting another Scoopinion user's profile page in order to see what he has read. Based on his prior knowledge and experiences about this person, the interviewee made a *prediction* about what kind of material the owner of the visited profile page has read. The participant assumes that the behavior of the person he is speaking about is coherent: he has read this kind of material before, so he probably reads same kind of material also in the future. For a filter to work, it has to have some kind of continuum in the material it offers, some underlying logic which helps the users of the filter in question to guess in advance what kind of material it offers. Interviewee decides to visit other Scoopinion user's profile in order to find material about certain topics: he has a certain goal in mind, which he tries to achieve. The other user has read and shared material that is relevant to this goal before, so he might be a good source for information that helps to achieve the goal again.

On Twitter, the individuals or organizations who act as filters can be chosen by following their updates in the service. One interviewee stated about his Twitter usage that “[I follow] through Twitter same kind of content as those [what I mentioned before are], football and basketball” (007). The participant states that he has selected the filters he follows on Twitter based on his own interests. So the decision to follow someone is

based on evaluation about the material that the owner of the Twitter-account has shared in the past. The topics of the prior messages submitted in the service lead to an assumption that the owner of the account will continue to share information related to these topics also in the future.

The earlier iteration of the Scoopinon published what articles user has read in the service. The term “recommending” might not be the best way of describing articles shared in this way, but some of the interviewees spoke about them in a similar way as they spoke about material shared in other media. The Scoopinon users I interviewed stated that they mainly used the earlier version of Scoopinon to get article recommendations and considered the service mainly as a source for them. It might be possible that the user who got his or her reading habits published through the service did not see these as recommendations. One of the participants stated that the automatic sharing of reading habits was “*distressing*” and that “*it has to be clear that no one can go through, my reading habits are private and I don’t want that anyone can see that I read this kind of material*” (009). Facebook and Twitter may require a more active decision making process from users in order to share something compared to automatic sharing that happened in the earlier version of Scoopinon. Some of the participants of this study who accessed the articles shared automatically acted towards them in a similar way that they act towards recommendations made on social network sites. There were, however, exceptions. One participant stated that:

I think it is nice that my friends recommend that this is a good article, I willingly read it. But If I only see that he or she has read these, it feels like I would be watching over his or her shoulder when he or she is eating breakfast and clicking these [articles]. So I think that there is a difference between seeing what someone reads or if someone recommends something – what she or he has just read isn’t necessarily a good article. (010)

The decision to recommend something and simply sharing what you read are different according to this participant. The participant compares seeing what someone has shared automatically to peeking into that individual’s private life, which can be pretty boring or mundane, at least in the example above. The eating of breakfast is not necessarily an interesting sight. Not everything that other people read is interesting, either. When

recommending something for others, the recommendation is special: out of all the articles I have read today, others should really read this one.

When comparing Scoopinion and social network sites as sources of recommendations, Scoopinion offers less visible social information, since the individual readers on whose behavioral information the recommendations are based on are not visible in the service. The recommendations are based on quantified data. An individual cannot see who the users that have read the recommended articles are and what the readers have thought about the articles. The articles that the Scoopinion recommends lack the meaning that the readers have given to them. However, the participant's I interviewed gave a meaning to the behavior of the other readers. They translated the reading time as a measure of interest.

7.3 Perceptions of sociality in Scoopinion

This chapter overlaps with the former: I will discuss here how the sociality of Scoopinion is perceived, but it is impossible to fully distinguish the sociality of Scoopinion from the articles it recommends. The recommendations are a result of the sociality, and the sociality of the service is only visible through the articles.

7.3.1 Invisible others

As mentioned before in the chapter where I described Scoopinion, in its current layout individuals cannot see any of the other users of the service. Regardless of this, their existence was still acknowledged. This is not surprising, since Scoopinion is inherently social, even though sociality is not visible in the same manner as it is, for example, in Facebook. Nevertheless, all of the recommendations that the Scoopinion's algorithm offers are based on the reading behavior of the users. If there was no one using the service, the algorithm simply would not work. There would not be any data to generate recommendations from. All interaction that happens between users in the Scoopinion is mediated by the algorithm. Users cannot choose to see recommendations only from certain individuals. Take the following excerpt as an example:

If it seems like I can't find anything interesting from anywhere, I might go to Scoopinion to see what has interested other people more from this kind of long journalism. (002)

Algorithm offers material that is based on quantified data about what is going on at the users' screens. It is the users themselves who make the interpretations about it as a measure of interest, and to be more precise, the interests of others. As the excerpt above shows, these interpretations are made about the behavior of other people. Of course these interpretations are also offered by Scoopinion: the staff believes in their company and its business idea. Interviewees of this study had personal connections to the Scoopinion staff and had been recruited to test the service by them. The staff of the service probably has communicated the idea of measuring interest by measuring reading time to the participants of this study.

Users also acknowledge certain technical aspects of the Scoopinion. As I mentioned before, Scoopinion has an emphasis on longer articles, since longer articles require more time to read than shorter. Because of this emphasis, Scoopinion is seen as a source for long, deep articles, instead of "fast news" as one user described. It might be that there would not be a huge difference if the Scoopinion would recommend long articles based on click counts or even randomly. After all, this tendency to offer long articles is a feature that combines recommendations together: even though the topics differ quite a lot, users spoke about the deepness and time consuming qualities of Scoopinion's offerings in general. The service does not offer any visible indicators that would somehow even imply that there are other readers using the service. Users of the Scoopinion *trust* that the service does what it says it does. They *trust* that there are other Scoopinion users, the invisible others, that have read the articles thoroughly before the service decides to let them through. It is logical to believe that, because it would be strange if the service would collect information about the reading habits of the users, and not use it in any way. However, no one can see how the collected data is used by the Scoopinion, except the staff working for the service. Yet, the main strength of Scoopinion was, according to the participants, its way of measuring interest. The service uses other data than click amounts to measure the relevancy of an article. But the Scoopinion users cannot see it. The following extract illustrates this:

There is that core idea, which I believe to be working, that what it offers is really based on what I read on the web, it has stayed the same [the core idea] and it clearly offers me stories based on something else, presumably on those reading habits, that the stories I get have actually been read. (009)

For the users, the interest other people have shown to the articles recommended only exists in their head: they think other people have found the articles interesting and that they have been evaluated for them in advance. The interest of other people functions as a cue: if others read this, it holds something of value that convinced them to read it.

Participants I interviewed did not blindly trust the algorithm of the Scoopinion. They questioned its ability to provide them with personalized recommendations. One interviewee said that *“I have no clue how well it [Scoopinion] chooses articles for me”* (001). It is hard to say if the recommendations are spot on, since they differ a lot regarding the topics they handle. The recommendations are not tied together by their topics, but by the assumption that there are other Scoopinion users who have read the recommended articles. The combining factor of the recommendations Scoopinion offers is their sociality and that they have been considered as interesting by other people. The Scoopinion staff does not advocate any certain topics to the service’s recommendations. The topics that thrive in the service are a result of collaborative filtering. The service offers the means for recommending with its algorithm, but the recommendations themselves are based on what the users have read. Recommendations are social, but the sociality of the Scoopinion is also something that users have to create on their own, based on what they are told about the service and how they understand it.

When using the service, Scoopinion users are primed to believe that the limited setting (when compared to all available articles in the whitelisted sites) of articles that is catered for them is based on human behavior that is interpreted as *showing interest*. And the interviewees were quite pleased with this catering. But not a single one said that they read every single one of them, not even from the personalized recommendations delivered straight to their e-mail. One interviewee stated that: *“for a user I’d say that you can discover [from Scoopinion] articles that people have considered worth reading or what they have delved into”* (003), when I asked him how he would describe Scoopinion to someone who is not familiar with the service. This description does not

include anything that somehow relates to the *content* of the recommendations or *topics* that tend to thrive in the service. When describing Scoopinion, the user does not say anything he could in fact *perceive*. He states an assumption that the algorithm measures people's judgment about what is worth reading and "delving into". Assumptions about Scoopinion's algorithm are also assumptions about the relationship between the behavior and motives of other users. The participant describes the service by mentioning other users, even though the other users are completely invisible for him in the user interface of the service.

It might not be surprising that if someone who has decided to read something is offered a large amount of articles from different magazines, she or he will read at least one of them. One user stated the following: "[from Scoopinion] comes much more broadly content than from these that I otherwise read [referring to magazines he routinely visits]" (007). The data that Scoopinion has collected from its users shows that approximately 90% of the users that open the Scoopinion e-mail digest end up reading something from the included recommendations (Sundberg, 2013).

Although Scoopinion offers personalized recommendations, interviewees tended to speak more about the influence of other users' behavior to the service's recommendations than their own. They did acknowledge that their own behavior also plays a part in this equation, at least in terms of what recommendations the user receives. The articles were brought to them from other users, and more specifically, from a large amount of users. One user said that "*there could be half the world reading in there and it also seems like it, [Scoopinion offers] big news, quality news, international stories*" (006). Interviewees stated that Scoopinion's way of measuring articles' quality was more *trustworthy* than the amount of clicks links generate, since it measures the time spent on the article, rather than just the amount of times the article was accessed. However, a few participants also mentioned that the method of following this kind of behavior is not flawless, because it lacks the *context* where the reading has happened. For example, one user described Scoopinion as a service that "*recommends material that one has enjoyed reading, as far as I understand, also what one haven't enjoyed reading*" (010). Another user states that Scoopinion cannot understand the *reason* why someone is on any particular website:

People have looked at that site for a longer period of time for at least some reason, and it [Scoopinion's recommendation system] isn't based on click amounts or something other trivial information, but it also could be that the site has been somehow hard to use and someone has been on the site for a long time because of that or it [the site] could have spent a lot of time loading. (008)

So even though Scoopinion's way of recommending was seen as an improvement over click-count based approaches of evaluating people's interest, it is not perfect. There has to be some reason for a user to be on the site, although Scoopinion cannot tell what that reason is.

Trustworthiness was also linked to anonymity: since it is impossible for other users to see who reads what, it was sometimes stated that recommendations were more *honest*. This was argued on a basis that the user does not have a need to be afraid of the consequences of their reading habits, because the information about them is not visible to other Scoopinion users. One user interviewed stated the following:

I don't remember who it was that said that when a human has this mask, he or she says things as they really are. So faceless behavior is more honest, and due to this you might get a better picture about everything. (004)

If other people cannot see what you read, they cannot evaluate your reading behavior. In the excerpt above, the participant implies that in this situation there is no need to filter off articles that could cause embarrassment. Articles that people did not want to share were described as somehow meaningless or having "stupid topics", such as celebrity gossips. People do not anymore have a reason to monitor what they read: this was an issue for some of the people interviewed when they spoke about earlier version of Scoopinion, which shared data about the reading behavior to other users. This is an interesting point since it was, at the same time, often mentioned that material that somehow went under these "stupid topics" is filtered off from Scoopinion's recommendations according to interviewees. The reason for this could be that the algorithm tends to recommend long articles. It might be that the articles that are categorized under the label "stupid topics" are usually short.

It was clearly difficult for the participants to explain how exactly information about their own behavior and the behavior of others was used to choose the recommendations Scoopinion made. This is not surprising, since information on the recommendation process is not available for the users.

Scoopinion was also used as a tool to deliberately see what have interested others, instead of choosing to read material by one's own interests:

I may go and be like: this topic does not exactly interest me, but it could be something that we also could do something about [refers to his employer] and I may mark it up for later. (002)

The participant describes here that he sometimes uses Scoopinion in order to get information about public opinion, that is, what other people consider interesting. The recommendations that were shown on the website of the Scoopinion were interpreted as information about the preferences of the masses using the Scoopinion by the participant.

Since Scoopinion's recommendations are perceived as something chosen because of attention other users have paid to them, they feel inherently social. Recommendations that end up in front of a users' eyes are seen as the result of a process that is, in a sense, democratic. One interviewee stated that *"It's communal in a larger scale, you cannot target an individual from there anymore, it shows how the community has behaved"* (004) when comparing the Scoopinion's earlier version to the current. Another user said that *"it doesn't matter who reads it, but if its read and the article rises because of that, so let's let the audience decide about that."* (006). In this statement the interviewee referred to the possibility of choosing articles based on the status of the reader that was possible in the earlier version of Scoopinion: for example, if someone had expertise in economics, it could be used as a cue to read the material he or she had read about the economic situation.

In the current version of Scoopinion, the masses decide, by their behavior, what ends up high in the recommendations offered to different subsets of people. So topics that tend to come up frequently in Scoopinion create a certain kind of picture about its users. Sociality is perceived through what Scoopinion recommends. Articles about new

information technology and gadgets would not end up in high positions in Scoopinion's endless scroll, if they were not read by its users. So Scoopinion offers users not only recommendations, but implicitly also information about Scoopinion as a community. After all, if the algorithm measures interest, in a purely quantitative way the article highest in the scroll is also the most interesting article at the current time according to the majority of the users who have the browser plug-in installed. It has to be taken into account that the participants I interviewed did not seem to be aware about the fact that the 16 first articles in the scroll of the Scoopinion website are personalized. The scroll was thought to be based on information that is collected from all the users.

Since it is perceived that the recommendations that come through Scoopinion have been read by other people, and not only read but read *thoroughly* and they have some sort of an order of relevance based on what is read the most, in a sense the community of Scoopinion users vote through their behavior what is good and relevant. Scoopinion makes a promise to users. Other people have considered recommended material worth reading, and Scoopinion's algorithm works in a way that it delivers this well-read material to the user. But since it is impossible for the user to see the actual process of delivering and evaluating material, the supposed evaluation process of other people, is mediated through the algorithm. The algorithm is not only a mediator for recommendations, but also for a certain kind of picture about people's tastes. Every recommendation given by Scoopinion is carried with a promise: our algorithm has identified, based on your own behavior and the behavior of others, that this article which has been well read by other people is suited for your tastes.

7.3.2 Assumptions about the sources of recommendations

Something about articles read by people familiar to us makes them more special than material read by strangers. For example, regarding the current version of Scoopinion, there were both wishes and misconceptions about the way the service makes recommendations. Several participants stated that they would like to get a different set of recommendations based on the reading habits of their friends, in addition to Scoopinion's current way of recommending, which is based on personal reading data and the data collected from all other users who have installed the browser plug-in.

When speaking about the pre-change version of Scoopinon which had elements of a social network site, one subject made the following statement:

Scoopinon was more of a community; the people were more on the top. So if you read same kind of stuff with certain people, you were like, there's something similar in us. (006)

In the extract above it is described that common reading habits are something that binds people together: it offers some kind of common ground in which people relate with one another.

Some users thought that linking their Scoopinon account to Facebook had an impact on the recommendations they received. All participants I interviewed were Scoopinon users already in its former iteration, and the former version of Scoopinon imported user's social network from Facebook to Scoopinon. This way Scoopinon identified which Facebook-friends of the user were also Scoopinon users. At the moment, the possibility to link the Scoopinon account to Facebook may be perceived as something that has an impact on the user experience. This is because it may be hard to fathom why the possibility to log in to Scoopinon with one's Facebook-account would otherwise exist. One of the reasons for the feature's continued existence is that it is sometimes perceived easier to log through Facebook into multiple services, instead of remembering passwords and usernames for multiple different websites. At the moment the feature exists only because of its convenience: it does not affect the recommendations that Scoopinon offers. Nevertheless, it had an effect on how some of the interviewees thought about the process behind the recommendations they received from Scoopinon. One user, for example, stated that *"I guess that it somehow weights my network since I have contacts in there [Scoopinon]"* (003). There are no contacts in Scoopinon anymore. I learned from the discussions I had with the Scoopinon staff that the personal social networks of the service's users do not affect the recommendations in any way.

The misconceptions about the effect of one's own social network lead to some interesting insights. It was once possible to see one's Facebook-friends who also used the service on Scoopinon's website. So the connection between Facebook and

Scoopinion was clearer: Scoopinion used one's Facebook-profile's information in order to establish the profile page and social network of the user to their own site. This feature has since been scrapped when Scoopinion's layout was completely overhauled, but it seems that some users feel that the effects of this earlier connection still linger in the recommendations they get. This in turn affects how the recommendations received are interpreted.

One of the participants had asked from the Scoopinion staff that they would remove the link between her Facebook-profile and Scoopinion:

I asked them to remove that link between Facebook and Scoopinion— I had a feeling that it slightly affected them [the recommendations], or you could say that I suddenly got his unconscious feeling that it still offers good articles but something is left out. (001)

The participant stated that she wanted to sever the tie between the two services because she had a feeling that the connection between Facebook and Scoopinion had affected the recommendations too much. After the link was cut, she felt that there had been some change in the recommendations. She perceived that after the link was removed, the recommendations were from a broader area than before.

It may be that there was a change in recommendations she received. However, if some kind of change did actually happen it did not occur because of the link between Scoopinion and the user's Facebook-profile was severed. The participant might have perceived a change that did not happen. If there was some change in the recommendations, user might have attributed the cause of the change to the removal of the connection between Facebook and Scoopinion. An assumption that the participant had about the Scoopinion as a social service affected her interpretation about the recommendations it makes. In Scoopinion's case, as I have pointed out before, there is no possibility to check how one's own behavior or the behavior of others affects the recommendations that one receives.

Another user, who also thought that her social network on Facebook affected the recommendations offered by Scoopinion found a contradiction between the

recommendations she received and her assumptions about the behavior of the people in her social network:

I don't know why is it so, that I mostly get English-language recommendations, very seldom [Scoopinion recommends] Finnish-language news, is it because I and all my friends read so much or that it is so smooth for us to read English-language magazines – – I'm sometimes confused that doesn't any of my friends read any Finnish news or anything in Finnish-language since so small amount of Finnish content ends up to my magazine. (009)

The only information about how the algorithm works that users actually could see at the time of the interviews was the recommendations, the end result of the algorithm's process. Scoopinion does not claim at its site that Facebook-friends affect the recommendations. However, they do not state the opposite, either. Users fill in the gaps when they try to make sense about the service, based on information that is available to them. In the excerpt above, user ponders the behavior of her friends. She clearly had a hard time believing that her social network only reads English-language magazines, but there was no information to prove this. She makes assumptions about the *input* of the service based on the visible the output, received recommendations. Since she had her Facebook-account linked to Scoopinion and the recommendations she received were mostly in English, information that was available to her in Scoopinion indicated that most of the material her friends consume is written in English. This misconception about the algorithm's way of working made her reflect on the behavior of the people she knows. Later in the interview she questioned the assumption she had and stated that she was not certain if her Facebook-friends affect the recommendations.

Users also wished that they could see a list of recommendations based on their own social network. One user said that "*I'm more interested in [what] my own network [reads]*" (003). This was stated in comparison to all Scoopinion users. Comments about this kind of feature imply that there is some added value in the material that is read by people from one's social network, when compared to recommendations that are based on the behavior of the unknown masses.

8 Discussion

In this chapter, I will discuss my findings and reflect on them in the light of prior literature. I will also consider the ethicality of this study. In addition, I will discuss the limitations of this study and topics for possible future research. Finally, I will present a short recap of the main results of this study.

Based on my analysis, I argue that the participants of this study see Scoopinion and social network sites as services that offer them access to material that they might have missed otherwise. According to Schafer et al. (2007, p. 296), similar reasons have been identified in prior research. Recommender systems have been evaluated before based on their ability to predict users' choices. However, it has become evident that they are often used for more than gaining material that is tailored exactly to their tastes. For example, people use them to browse through large amounts of material quickly and to explore new material (Shani & Gunawardana, 2011, p. 258). The findings of my analysis are in line with the prior literature suggesting this. The material that Scoopinion offered and that was received through social network sites was seen as something that one would not have read otherwise, since it was somehow outside the normal routines of news reading.

The amount of recommendations that a user is offered is important. There has to be some freedom for an individual to choose and compare recommendations with each other: for example, not a single interviewee stated that they read every personalized recommendation offered to them. The amount of recommendations that Scoopinion offers allows browsing them. The ability to browse makes it possible to discover in the way that Tewksbury et al. (2008) explain the term. Articles provided by Scoopinion are used for entertainment purposes and to gain information about social surroundings, since it offers material that others have found interesting. It could also be that the information about the interests of others is used in order to be prepared for possible future discussions with other people. Tewksbury et al. (2008) place all three aforementioned reasons for browsing news under the umbrella term of discovery. Scoopinion is not a great tool for searching particular information because the users have a very limited set of means with which to control what the service recommends, but it offers material from a wide range of topics.

Social filtering leaves something out, in addition to offering access to new content. Social recommender systems are used to avert possible information overload (O'Donovan & Smyth, 2005). This was in line with the results of my research. It appears that the participants considered the reading behavior of others as an effective measure of quality. As such the results fit into the social influence literature (e.g. Praktanis, 2007, p. 38): the average opinion was considered as an effective way to find interesting material. One of the reasons why Scoopinion was seen as an effective filter was that it does not require much effort from the user in order to be effective. The service is easily accessed and users provide information about their preferences implicitly with a browser plug-in. Scoopinion's e-mail digest was a core feature of its accessibility. The e-mail digest fit into existing routines of those interviewees who liked to read it. The ease of accessibility also applies to social network sites, since users of these services do not need to see much effort in order to receive recommendations through them. This is because other people provide the recommendations by sharing them on the services.

Using the appraisal model created by Helle et al. (2011, p. 18-21), the dimensions, that the news and article recommendations received through online social filtering were mostly evaluated on, were interestingness and entertainingness. Both of these were important in situations where online social filtering was used to fight boredom or to simply kill time in places like public transportation. Scoopinion was also evaluated on these dimensions. However, the service itself was not evaluated as interesting or entertaining: rather, it was evaluated on the basis of its ability to offer material that fell into these categories. Another dimension that was brought up when interviewees spoke about the Scoopinion was trustworthiness. This was related to information that the service collects: the participants that had the browser plug-in installed trusted that the service handles the data with confidentiality. Trustworthiness was also linked to the behavior that the recommendations were based on. The anonymity that the service offers was seen to lead into a situation where the users implicitly, by reading, recommended news and magazine articles that were based on actual behavior. This anonymized information was considered somehow more "real" than it would be if the behavioral data could be linked to certain individuals. Scoopinion was explained to

recommend material that has been actually read, not material that people submit in order to give a positive image of themselves.

The participants said that they mostly base their selection on what to read at any given moment by a whim: what seems interesting at the moment. Lueg (1997) proposes that human beings interest is dynamically generated, rather than stagnant: it emerges as a result of individual's interaction with the situation he or she is in, or as Lueg (1997, p. 2) calls it, the "information situation". Mock (1996) found out in his experiment that there are inconsistencies in evaluating material as either interesting or not interesting. In the experiment, users marked more messages as interesting after they read all of them, in contrast to an earlier stage of the experiment where they simply browsed through them. By reading the whole Usenet message, subjects were forced to get more information on which to base their evaluation about the material. This led to evaluating an increased amount of messages as interesting.

Users have the possibility to interact with the algorithm of the Scoopinion in an explicit or implicit way. However, there are rather limited possibilities to affect it in an explicit way. Most important explicit way of interacting with the algorithm seemed to be the existing possibility of suggesting magazines to be added to the service's whitelist. The implicit way of interacting with the service is simply by reading, when the browser plug-in is installed or by clicking links that Scoopinion offers. The data that the browser plug-in collects is translated into a measure of interest. Thus the recommendations that Scoopinion offers are seen as the end result of people's interest as expressed in behavior. The interaction between a user and the algorithm can be approached from the viewpoint of social influence: when suggesting a website to the whitelist, a user tries to convince the founders of Scoopinion about the relevancy of a certain publication. If the publication is accepted, the user has a chance to get recommendations from that publication, if other users read it enough. In a sense, suggesting a magazine to the whitelist can be seen as setting it as a possible target of voting. If the magazine is interesting enough in the eyes of the Scoopinion users, the service starts to give recommendations from it. Prior research suggests that in recommender systems that rely on explicit ratings from the users, users consider rating rewarding because they have contributed to advancing the community and feel gratified because their opinion has

been voiced and valued (Schafer et al., 2007, p. 310). Users suggesting sites to the Scoopinion whitelist may get similar kinds of rewarding feelings. Contributing by just reading may be different, because the users of Scoopinion probably would read online news and magazine articles anyway. Reading does not require any extra effort from them.

Scoopinion certainly benefits from the input of users regarding what websites its whitelist should include. Larger whitelist means more data for the algorithm. This should benefit the users also, since they get recommendations based on broader data set and from a larger selection of different magazines. However, with the internationalization of the service, founders of Scoopinion might face a new problem: if the pages users want to get added to the whitelist are in a foreign language that no one in the staff understands, on what premises can they make the decision to add or leave it out of the list? They either need to trust the users that recommend the websites or they need to find someone other, who is familiar with the media of the country in question, to evaluate the site for them. For example, Scoopinion has a policy that satirical newspapers such as The Onion are currently not included in the whitelist. But sites like this may have a layout that is similar to actual newspapers. Because of that, they may be confused with the webpages of actual newspapers, if the person viewing them lacks the ability to understand the language of the website.

In the introduction chapter I explained collaborative filtering recommender systems by using a metaphor. I compared them to a library, where the magazines that are closest to the entrance are placed there, because your peers in other libraries have preferred to read them. Let us return to this metaphor. Now, when you see the magazines closest to the entrance, you already know that they are there because other people have read them. Not only skimmed through them, but actually spent time with them. There is nothing that keeps you from walking further into the library, and reading magazines that are in other places, but you have to spend more effort reaching them than the stories that are right in front of your eyes. This is how the social influence flows in the collaborative filtering recommender systems. Recommender systems such as Scoopinion do not make decisions for us, but they make certain decisions easier to make than others. If there are thousands of magazines that are necessarily not read by anyone, should we make an

effort to reach them, or should we read the ones that are delivered right in front of our eyes because there are other individuals that have thought them interesting? And since your prior experiences are such that the magazines closest to the door usually have at least something that you decide to read, is there really any reason to go and wander further into the library? Users I interviewed were quite satisfied with Scoopinion's recommendations. This indicates that Scoopinion is considered a fairly good source for preference prediction, a term that Suls et al. (2000, 2002) use in their triadic model of opinion comparison. It has to be remembered that the recommendations the service offers are not just an end result of a technological process. They are based on a process that has both social and technological aspects. The participants did not mention that the recommendations of the Scoopinion are based on the behavior of similar others. However, it may be that since they have found that the service provides them with interesting articles based on the behavioral information collected from them and other users, they have concluded that the other users of the Scoopinion share tastes that are similar enough with their own. Suls et al. (2000) state that preference prediction is targeted at people who have shown consistency in their prior behavior. By this, they mean that the prior behavior has indicated similarity of judgments to those that the individual doing the comparison has done, or vice versa: the target may have systematically disliked items that the comparer has liked in the past. In the case of the Scoopinion, the preference prediction could mean that since the service has provided interesting material in the past, it probably will also in the future. Because the recommendations received through the Scoopinion were perceived to be pre-evaluated by other people, the tastes that these people had were considered to be similar to the individual receiving the recommendations.

The material that is accessed through social filtering is perceived as pre-evaluated. In Scoopinion's case this means that the users see it as read, instead of just glanced. Due to the limited amount of information Scoopinion offers, it is not clear who has read the articles it recommends, or whether they have actually been read at all. Algorithms are present in our daily lives and our assumptions about them make us ponder the world outside of the algorithms. In the case of the Scoopinion, the articles that the service's algorithm recommends reflect what other people have done while surfing in the Internet. Recommendations received through social network sites were evaluated not

only on the basis of their content, but also on the basis of who had shared them. The conclusion I make from my results is that assumptions about the process of recommendation and who the sources of these recommendations are perceived to be affect how the recommendations are interpreted. The findings of this study suggest that individuals are sometimes used as filters for content that is somehow related to their perceived area of expertise. Kulkarni and Chi (2013) have had similar findings. It seems that some individuals are perceived to have an ability to choose what is important on the field they represent and due to this reason, their recommendations are accepted even in situations where the topic is not necessarily something that the receiver would otherwise actively follow. It seems that these perceived experts are not only used for preference prediction, a term used by Suls et al. (2000, 2002), but their recommendations also have value because they are seen to be given from a position of an expert. Persuasiveness of a message is often increased, if the message is linked to a source that is perceived to hold expertise on the domain of the message (Pratkanis, 2007, p. 33). This could be a possible explanation for the findings I have presented. If a recommendation is interpreted as a message that states “you should read this, because it is important” and relates to the area of expertise of the recommender, it may be that the recommended material is considered more important than material shared by individuals who are not perceived as experts.

In the interviews, it was brought up that users were not certain about how well the algorithm functioned when giving personalized recommendations. One user stated that the personalized recommendations were usually not interesting. However, Scoopinion’s recommendations, according to users, had content that was “interesting to everyone”. One individual stated that the personalized recommendations were not usually interesting. This participant had appropriated the Scoopinion site for his source on technology-related articles that were found on the scrollable list on the Scoopinion site that was thought to be non-personalized. The scroll is only partly non-personalized, since 16 first recommendations in the list are based on the reading habits of the user. Even so, the scrollable list offers access to material that has been popular on a Scoopinion wide scale, after the 16 first articles. When considering this from the viewpoint of different social networks (Mason et al. 2007), the ability to choose what kind of network the material in Scoopinion was based on was seen as a positive feature

of the service. The user was not forced to stay in the cluster in which the algorithm had placed him or her. Instead, the user had the opportunity to see what material was most read in a bigger scale and pick content from there. Users are not bound to the opinions of similar others: they have access to material that has been read by a much larger network than just the one where their personalized recommendations are generated from. So if recommender systems have been designed to offer material only suited to the tastes of the user, they have been appropriated for other use in addition to that.

As Salganik et al. (2006) have shown, information about an item's popularity affects how it is evaluated: more popular items tend to become even more popular. Scoopinion's recommendations can be seen as informational majority influence suggested by Deutsch & Gerard (1955): recommendations are catered to users with a promise that other people have considered them interesting.

Participants interviewed interpreted Scoopinion's way of measuring time spent reading an article as a measure of interest, so the quantified data collected was qualified by giving it meaning behind the numbers. The implicit way that the Scoopinion uses to rate articles was seen as an expression of interest. The comparison that the participants made between the Scoopinion's way of measuring relevancy and the practice of counting click amounts that an article has collected seemed to amplify the meaning given to the behavioral information collected by the Scoopinion. The implicit way of evaluating articles was given an explicit meaning. Prior research shows that news articles that have been given positive reviews by other readers are read for a longer time by new readers than articles which have been given less positive reviews (Knobloch-Westerwick et al., 2005). This might be one of the reasons why the participants had an overall positive opinion about the Scoopinion. The assumption that other people have found the recommended articles interesting may have an effect on how interesting the material recommended by Scoopinion is evaluated to be. For example, it has been shown that positive reviews of mobile phones boost the subjective ratings of people using them (Raita & Oulasvirta, 2011). Positive expectations about the articles that Scoopinion recommends could also influence how interesting they are perceived to be.

It was mentioned in the interviews on several occasions that there is a difference between automatically collected data and recommendations that were done manually. From the results of this study, it could be argued that even though the articles that are shared automatically by certain individual may be considered negatively, since they lack the active intention and decision making process that is present when recommending articles manually, the recommendations that are based on the reading behavior of the masses do not necessarily hold these negative implications. The accurate behavioral data of multiple individuals may compensate the lack of social context and active decision making process that are present in recommendations that are made in social network sites. The reason why something has been read or recommended was not important, when the recommendation was thought to be the end result of a process that included multiple readers. On an individual level, the mere interest shown to certain article is not necessarily good enough assurance of quality. However, if it is thought that something has been deemed interesting by a large amount of individuals, it seemed to be interpreted as a more trustworthy promise about article's quality.

Social navigation, a term used by Dieberger et al. (2000), is useful when one considers meaning given to recommendations of Scoopinion. When a user receives recommendations from Scoopinion, they are perceived as articles that other users have thought of as interesting. This assumption about other people's interest is used as a part of social navigation, that is, articles are pre-evaluated by others and deemed interesting in comparison to others before they reach the user. There were assumptions and wishes about how individual's own social network affects the recommendations. Wishes about the ability to receive recommendations based on the individual's own social network are not surprising. People tend to create connections to people that are similar to them (McPherson et al., 2001). Suls et al. (2000, 2002) argue that when individuals use social comparison to predict their preferences, they tend to use similar others as the point of comparison.

The assumption that certain participants had about the effect of one's own social network was an interesting finding. The participants that assumed that those of their Facebook-friends who are also Scoopinion users affect their recommendations seemed to have come to this conclusion because of two reasons. The first reason is that in the

earlier version of the service users could have contacts. The second reason is that in the current version of Scoopinion, user can link her or his Facebook-account and Scoopinion-account with each other. Participants filled in the gaps, since there was no explicit information available that clearly stated that the Facebook-linking does not affect the recommendations.

Another possible way of approaching recommender systems in addition of social influence and social comparison perspectives I used in my research could be offered by the social identity approach (e.g. Tajfel & Turner, 1979). Social influence and social comparison can also be approached from the perspective that the social identity approach offers (e.g. Sassenberg & Jonas, 2012). Since my method of choice was grounded theory (Glaser & Strauss, 1967) and I conducted the analysis before literature review, I came to a conclusion that using the social identity approach would have led to forcing the data into something that was not clearly visible in it. Glaser (1992, p. 31) warns about forcing the data into categories when conducting research with grounded theory. Only one of the participants I interviewed talked about Scoopinion as a community that he is a part of: other participants spoke about it more as a tool for getting articles. This might be due to the hidden nature of other users of the service. All interaction between the users is mediated by Scoopinion's recommendation algorithm, and is limited to receiving articles and implicitly rating them with behavior. The personal identity of the participants was clearly more salient than social. One possibility for future research would be to examine if social identity is more salient in recommender systems where the presence of other users is more salient and there are more possibilities offered for interaction between users. There were some instances in the interview material where the participants spoke about the earlier iteration of Scoopinion, where the other users were more salient, that indicated stronger identification to Scoopinion users as a certain group. One possible explanation for this could be that there was a relatively small amount of Scoopinion users at the beginning of the service.

8.1 Ethical considerations

Flick (2006, p. 46) states that participants of research should have agreed to partake in the research. In addition, the research should not invade the privacy of the participants

or deceive them. All participants of this study expressed their consent to take part in the study. In order to protect the anonymity and privacy of the participants, I decided to present minimal personal information about them. I made this decision in order to make it impossible for the staff of the Scoopinion to identify the users.

The parts of my results where I present examples of situations where the participants have understood the way that Scoopinion works somehow incorrectly cause some ethical problems. During the interviews I did not correct the participants who thought that their contacts in the social network site Facebook affect their recommendations. The misunderstanding of the way how the service functions could potentially cause some embarrassment for the participants, when discussed in a study that is publicly available. Reason why I did not correct the participants about the fact that the linking of Facebook and Scoopinion does not affect the recommendations was simple. When I was conducting the interviews, I did not know that connecting one's Facebook and Scoopinion accounts do not affect the recommendations. I asked about this from the staff of the Scoopinion when I was conducting my analysis. I would suggest that the service should make the information about the recommendation process more accessible for its users.

Collaborating with the Scoopinion staff while conducting research about their service should be considered from an ethical standpoint. The discussions I had with the staff might, in a worst case scenario, make me biased when conducting the research. However, I evaluated the service critically, and the staff of the service have implied that they are interested to see the results of a research that is conducted from a neutral standpoint. This is because the results of such study may offer something that has not been found in the internal user studies the Scoopinion staff has conducted. Because of this, the staff of the service were not motivated to affect the results of my study.

8.2 Limitations of this study and topics for future research

Participants did not mention that the recommendations they get from Scoopinion are based on the behavior of similar others. The reason for this could be that the participants did not know it. Another possible explanation could be that it was not mentioned because I did not explicitly ask about it. It cannot be assumed in an interviewing

situation that the interviewees can tell everything they know about the issue. Theoretical sampling, which means collecting more research material guided by the ideas that have emerged from the analysis (Glaser, 1992, p. 104) might have helped to clarify if the Scoopinion users were aware of the comparison that the algorithm does between individuals that share behavioral similarities.

Since this study was qualitative and the participants were a rather homogenous group, the generalization of the results should be considered critically. It is also important to remember that the interviewees all knew personally at least one member of the Scoopinion staff. It can be entirely possible that their perceptions about the service differ from the perceptions of those users who are not familiar with the individuals behind the service. The familiarity of the founders of the Scoopinion might explain why majority of the participants were willing to install the browser plug-in and send information about their reading behavior to the service. They may trust the staff because of their personal relationship with them. Another possible reason for this willingness is that the layout of the Scoopinion website is, according to the interviewees, clean and it gives a positive image about the service. Layouts have been shown to affect the perceived trustworthiness of websites (Briggs et al., 2002).

Some of the results of my study need an experimental setting for further clarification. One example would be to find out how the assumptions that the participants have about the others whose behavioral information is used to generate recommendations affect the perceived interestingness of the recommendations. It has been shown that recommendations made by friends are valued more than those made by recommender systems (Sinha & Swearingen, 2001). Prior research has shown that in an online setting, news that have been read by friends are evaluated as more interesting than those that have been read by strangers (Kulkarni & Chi, 2013). Kulkarni and Chi (2013) also discovered findings in their post-experiment interviews that were in line with those that I have presented in this study: certain individuals act as sources for recommendations on topics that are related to the area of expertise of these individuals. In addition, these topics are not necessarily followed otherwise. The material recommended by the perceived experts might be the only content that is consumed relating to these topics. Based on the results of prior research and on the findings of my study, it might be

interesting to study this phenomena on group level. This could be studied by telling the participants that the recommendations they receive through collaborative filtering are based on the behavior of different social groups they belong to. For example, it could be investigated if recommendations that are told to be based on the behavior of family members are seen as more interesting than those that are claimed to be generated from the reading data of co-workers.

8.3 Concluding remarks

The findings of this study indicate that online social filtering of news and articles is used to gain access to material that is somehow outside one's routines, to avert possible information overload by using the prior evaluations made by others to filter content, and simply for entertainment purposes in times when there is not necessarily anything else to do.

In the case of Scoopinion, online social filtering is perceived as a process, which the users of the service can affect by suggesting sites to the whitelist in order to communicate what webpages they think are relevant sources for recommendations. In addition, users can interact with the algorithm simply by reading, if they have the browser plug-in that tracks their reading behavior installed. Information that the algorithm of the Scoopinion collects with the browser plug-in was interpreted as showing interest, but on the other hand it was stated that the automatically collected information lacked context and the meaning that an individual gives to her or his behavior. Individuals do not consider everything they read equally important. Recommendations received on services that showed the individual who had recommended an article were in some situations evaluated partly on the basis of the perceived expertise of the recommender. If an individual who had expertise on economics made a recommendation relating to this topic, the recommended article gained importance because of the recommender's expertise. The expert was seen to possess the ability to pick the most relevant material of her or his field of expertise.

Lack of clear information about the way that the Scoopinion's algorithm selects the recommended articles sometimes led to misinterpretations. It was not clear whose behavioral information affected the recommendations. The possibility to connect one's

Scoopinion-account and Facebook-account was in some cases thought to affect the recommendations. In these cases, there was a false assumption that the Scoopinion users who were user's contacts on Facebook affected the recommendations more than other Scoopinion users.

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Appendixes

Appendix 1: Interview outline

Kiitos haastatteluun suostumisesta. Tässä haastattelussa olen kiinnostunut Scoopinioniin liittyvästä käytöstäsi ja ajatuksistasi. Haastattelua tullaan käyttämään vain tutkimustarkoituksessa ja se on ehdottoman luottamuksellinen. Henkilötietojasi ei yhdistetä haastatteluun ja materiaali on vain tutkimusryhmän käytössä. Ennen kuin aloitamme, onko sinulla kysymyksiä haastatteluun liittyen?

Ikäsi?

Ammatti?

Mediakulutus

Voisitko kuvailla median käyttöäsi?

- Onko sinulla jotakin suosikkilähdettä uutisille tai artikkeleille?

Miten kuvailisit päivittäistä Internetin käyttöäsi? *(Jos ei tule esille vielä yleisluontoisemmassa mediakysymyksessä?)*

- Käytätkö jotain sosiaalisen median palveluita?
 - o Jos kyllä: jaatko sisältöä näiden kautta tai saatko suosituksia niistä?
 - o Oletko jakanut esimerkiksi Scoopinionin kautta löytämiäsi artikkeleita?

Tausta Scoopinionin käyttäjänä

Kuinka kauan olet käyttänyt Scoopinionia?

Miten käytät Scoopinionia?

- Muistatko milloin viimeksi kävit sivulla?
- Mitkä asiat vaikuttavat siihen, että päädyt lukemaan Scoopparin kautta uutista
- Onko sinulla selainlisäosa asennettuna?
 - o Koitatko vaikuttaa sisältöön (unohda artikkeli)?
- Oletko lukenut Scoopinionin sähköpostiuutiskirjeitä?
- Onko Scoopinionin käyttösi jollakin tavalla muuttunut jo rutiininomaiseksi?

Miten päädyit Scoopinionin käyttäjäksi?

- Mahdolliset tutut käyttäjät / ihmiset jotka työskentelevät Scoopinionin parissa?

Muutos

Miten kuvailisit Scoopinionia sellaiselle ihmiselle, joka ei ole koskaan käyttänyt palvelua?

- Miten kuvailisit Scoopinionin tapaa valita suositeltuja artikkeleita?
- Sanoit olleesi Scoopinionin käyttäjä (X) kuukautta. Oletko tänä aikana huomannut palvelussa muutoksia?
 - Miten kuvailisit muutosta?
 - o Miten kuvailisit palvelua ennen muutosta?
 - o Mikä asia muuttui kaikkein merkittävimmin?
 - Oman käyttösi kannalta?
 - Mikä asia pysyi samana?
 - Kuulitko jostain etukäteen muutoksesta?
 - Muistatko, millainen oli ensimmäinen reaktiosi tai ensimmäiset ajatuksesi kun kuulit muutoksesta?

Mitä mieltä olet itse muutoksesta?

- Oliko muutoksella itsellesi mitään väliä?
- Voisitko kuvailla omaa tottumistasi muutokseen?
- Muutokseen voi liittyä positiivisia ja negatiivisia asioita. Nostan tässä esiin muutaman niistä ja haluaisin kuulla ajatuksiasi niistä
 - o Yksityisyyden paraneminen?
 - Achievementit?
 - o Sosiaalisuuden puuttuminen?
 - o Jonkin aiemman ominaisuuden menettäminen?
 - o Tuleeko mieleen jotain muita muutokseen liittyviä asioita?
- Jos ajattelet omalta kannaltasi, kummasta konseptista on enemmän hyötyä sinulle?
 - o Osaatko sanoa syitä, miksi jatkoit palvelun käyttämistä?
- Palvelun ylläpitäjillä on varmaan ollut omat syynsä palvelu-uudistuksen tekemiseen. Millaisia asioita luulet muutoksen taustalla olleen?

Vielä lopuksi: tuleeko mieleesi joitain muita sivusto-uudistuksia joita olet kokenut?

- Jos kyllä, niin mitä?
- Tuleeko mieleesi jotain, jota on jäänyt kysymättä tai haluatko täydentää jotain aiemmin puhumaamme?

Ero muuhun automaattiseen jakamiseen

Appendix 2: Codes used in the analysis

Code-Filter: Code Family "AAA_Kategoria: ACCESS Unknown content"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:41:53

AAA_Kategoria: ACCESS Unknown content

Ajankohtaiset "hyvä tietää" asiat tulevat monesta paikkaa
 Harvemmin seurattuja sivuja sosiaalisen median kautta
 Henkilökohtaisista suosituksista aina jokin kiinnostaa
 Käy uutiskirjeen läpi lähes aina kun se tulee
 Laidasta laitaan aihepiiriä
 Loputon tarjonta scrollissa
 Lähteet sellaisia joita ei olisi muuten lukenut
 Melkein aina jotain kattoo
 Motivaatio käyttöön
 Omien rutiinien ulkopuolella olevia sivuja sosiaalisen median kautta
 Oppinut lukemaan artikkeleita laidasta laitaan
 Perceived expertise through occupation
 Scoopinion tarjoaa rutiineja laajemman kattauksen sisältöä
 Scoopinion yksinkertaistunut: huonompi vai parempi?
 Scoopinionia helpompi katsoa kun käydä läpi monta mediaa
 Scoopinionia käyttäessä jotain tulee aina avattua
 Scoopinionin kautta materiaalia jota ei muuten tulisi lukeneeksi
 Scoopinionin kautta omien rutiinien ulkopuolisiin lehtiin
 Scoopinionin kautta surffaamaan tiettyjen lehtien sivuille
 Scoopinionin loputonta scrollia tulee käytyä läpi
 Scoopinionin suositukset: lähteiden moninaisuus hyvä juttu
 Scoopinionin suositukset: materiaali joka rikkoo omaa ajattelumallia, "tästä en oo kuullutkaan"
 Scoopinionin suositukset: mitä ei muuten lukisi
 Scoopinionin tarjonta: "tarjoaa jotain lisää"
 Scooppari jos muualta ei ole löytynyt kiinnostavaa
 Skuuppari tarjoaa tiettyntyyppistä sisältöä, jota ei aktiivisesti hae muualta
 Tärkeät jutut muualta ku skuupparista
 Ulkomaalaisen median nopeus verrattuna suomeen
 Uusia sivuja sosiaalisen median kautta
 Uutiskirje
 Vaikka materiaali omien rutiinien ulkopuolella, aihepiirit omien kiinnostusten mukaan

Code-Filter: Code Family "AAA_MOT:infotulva"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:42:34

AAA_MOT:infotulva

Ajansäästön ja informaatiohyödyn maksimointi

Digestien kautta materiaalia, skupperin uutiskirje enemmän kuin itse sivu
Facebookin kautta kun aika riittää
Facebookin kontaktit suodattavat koska aika ei riitä
Facebookissa suuri osa jaoista typeriä
Facebookissa suuri osa jaoista typeriä uutisia
Fiksuja juttuja, kohu-uutisointi filtteriöityy ulkopuolelle
Ihminen filtteriöi sosiaalisessa mediassa materiaalia valmiiksi
Informaatiotulvan vähentäminen
Joku suodattaa uutisvirtaa ja tietoa
kivempi mennä uimaa puroon kun..
Käyttöliittymä: selkeys
Motivaatio käyttöön
Muut tekevät poimintaa: informaatiotulva?
Relevantti sisältö ainoastaan näkyvillä
Scoopinion helppokäyttöinen
Scoopinion virtaviivaistettu nyt: automaattinen, yksinkertainen
Scoopinionia helpompi katsoa kun käydä läpi monta mediaa
Scoopinionin hyöty: ajankäytön tehostaminen
Scoopinionin suositukset: laatu on hyvä
Sisällön oltava valmiiksi suodatettua
Suodattimien kautta tärkeimmät nousevat virrasta
Suosituksen eteen ei tarvitse itse tehdä juuri mitään
Uutiskirje lisäsi käyttöä
Uutiskirje ollut hyödyllinen, koska se tulee "luokse"
Uutiskirje suositteletapana hyvä koska sitä ei tarvitse heti

Code-Filter: Code Family "AAA_Kategoria: Killing time"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:43:45

AAA_Kategoria: Killing time

Scoopinion jos ei muuta tekemistä
Scoopinionia kun ei ole muuta tekemistä: uutiskirje bussissa kännykällä
Scoopinionin kautta lukeminen sidottua tiettyyn aikaan
Scoopinionin suositukset: kännykän näyttö liian pieni
Scoopinionin tarjonta on aikaavievää
Uutiskirje hyvä, koska sähköpostia ei tarvitse vahtia samalla tavalla kuin twitteriä, facebookia: ubiq

Code-Filter: Code Family "AAA_Vuorovaikutus algoritmin kanssa"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:44:34

A_ ehdottanut whitelistille

AAA_Vuorovaikutus algoritmin kanssa
Chilling effect oman vaikutuksen suhteen scoopparin suosituksiin
Lukutottumuksista tehdään päätelmiä henkilöstä
Mahdollinen havaittu vaikutus kun lisäosa poistui käytöstä
Manuaalinen rating voisi olla kätevä
Mitä luemme on henkilökohtaisempaa ja kertoo ihmisestä
Oman datan anto ok, koska halutaan sen vaikuttavan
Oman lukudatan vaikutus
Oman vaikutuksen ja itsen näkemisen hakeminen skuurparista
Omat lukutottumukset vaihtelevat, työ vs. vapaa-aika
Omien kiinnostusten mukaan lukemine: kuitenkin aika randomilla
Pyrkii katsomaan, tuleeko oman lukemisen kautta skuurpariin artikkeleita
Scoopinion pyrkii suosittelemaan samankaltaisia kuin itse lukee
Scoopinion: palvelu joka muistaa mitä luet
Scoopinionin oravanpyörä
Scoopinionin suositukset: ei juurikaan urheilua, huolimatta siitä että käyttäjä seuraa sitä (algoritmi?)
Tarjoaa oman käyttäytymisen perusteella luettavaa
Tietoisuus siitä mitä seurataan
Uutistenlukutottumusten perusteella tehdään päätelmiä ihmisistä

Code-Filter: Code Family "AAA_Käsitys sos. filt kautta tulleista artsuista"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:45:43

AAA: Lähteen ja suosituksen suhde ja vuorovaikutus
AAA_Käsitys sos. filt kautta tulleista artsuista
Algoritmi varmasti käyttäjän mukaan muuttunut, mutta sitä ei näe
Algoritmia muutettu sisällön laadun korjaamiseksi
Algoritmin tuottamat tulokset johdonmukaisia: bugin takia joskus päässyt sisään jotain mikä ei kuulunut
Ei osaa kertoa, miten scooppari suosittelee: magiaa taustalla
Ei tiedä mikä on muuttunut, havaittu suositusten muutos
Ei varma, miten scoopparin algoritmi tällä hetkellä toimii
Epärelevantti tieto pois: luetuimmat vain järjestyksessä
Epätietoisuus suosittelumekanismista
Feedissä hyvää luettavaa: vaatii omaa seulontaa, henk. koht suositukset eivät osu kohdalleen
Harvoin uusia suosituksia sosiaalisesta mediasta
Henkilökohtaiset suositukset: eivät päivitty tarpeeksi usein (samoja juttuja), otsikon perusteella toteaa ettei kiinnosta
Ihminen filteröi sosiaalisessa mediassa materiaalia valmiiksi
Ihmiset eivät lue kilpailumielessä
Kavereiden hyväksi luokittelemia artikkeleja lukee mielellään
Klikkaus jos todennäköisesti lukee jutun
Kontrollin lisääntyminen veisi pois automaattisuuden kauneutta
Kontrollin toive: kategoriat. Mahdollisesti ei tulisi käytettyä, mutta mahdollisuus olisi kiva
Linkin katkaiseminen lukijan ja luetun välillä hyvä, koska juttu nousee itsessään esille paremmin
Mietti muuttuessa, muuttuiko algoritmi
Muut suosittelupalvelut (esim twitter) ajavat henkilöön sidottujen suositusten tehtävän'
Oman datan näkyminen saattaisi toimia signaalina käyttäjälle toiminnasta
Pidemmät artikkelit päätyvät koska ihmiset lukevat niitä pitkään
Scoopinionin suosittelumekanismi "luotettavampi" kerätyn datan takia

Scoopinion ei välttämättä tämän päivän uutisia
Scoopinion ja vastaavat tarjoavat hyvin kirjoitettua materiaalia, joka ei välttämättä oleellista ammatti-identiteetin kannalta
Scoopinion tarjoaa "mahdollisesti mielenkiintoisia"
Scoopinion tarjoaa pidempiä reportaaseja
Scoopinion valikoi aiheiden yli suosituksia
Scoopinion vertautuu aikakauslehteen
Scoopinion: urheilu-uutiset ei erikoistuneista lehdistä (tulee guardianista)
Scoopinionin käyttöliittymä: käyttäjän ei itse tarvitse kaivaa mitään, sitä saa sen minkä näkee
Scoopinionin lukudata voisi olla toimittajille mielenkiintoista
Scoopinionin suodatin valvoo laatua
Scoopinionin suositelu: tarjoaa paljon "yleisiä jotka kiinnostaa sit kaikkii"
Scoopinionin suositelumekanismi ei kuitenkaan täysin varma
Scoopinionin suositukset: algoritmi valitsee top feediin hyvin kiinnostavat
Scoopinionin suositukset: kansainvälisyys
Scoopinionin suositukset: luottaa tarjottuihin
Scoopinionin suositukset: materiaalia, mitä on pidetty lukemisen arvoisena
Scoopinionin suositukset: mitä muutki lukee, paljon luettu ja kuinka pitkälle
Scoopinionin suositukset: näkee mistä juttu on (lehti), helpottaa arviointia
Scoopinionin suositukset: syviä juttuja
Scoopinionin suositukset: toimii tarpeeksi hyvin
Scoopinionin suositukset: välillä itselle vieraita, koska sitä ehdotetaan: kokeilln
Scoopinionin suositusmekanismi koetaan paremmaksi kuin klikkausten määrä
Scoopinionin suositusmekanismi tarjoaa oikeasti luettuja juttuja
Scoopinionin tarjonta on aikaavievää
Scoopinionissa voi luottaa palvelun tarjoamien juttujen tasoon
Scoopinarin suositelumekanismi erilainen tapa mitata kiinnostavuutta kuin klikkikerrat
Scoopinarin suositukset: henkilökohtaisissa vähemmän kiinnostavia kuin toplistalla
Seurattavissa blogeissa oma suodatus luetuimpien juttujen mukaan
SOS_Scoopinion filteröi sisältöä ihmisten lukuajan mukaan
Suodatuksen tekninen puoli
Suosittelumekanismi: ei tiedä miten toimii
Suosituksien järjestyksessä
Toimittajalle palaute mitä voisi tehdä, käyttäjälle mikä on kiinnostanut muita, kiinnostaa ehkä sinua
Twitter pääkanava artikkelien seuraamisessa
Twitter pääkanava artikkelien vastaanottamiseen
Twitterin kaiku
Työhön liittyvät tärkeät asiat sosiaalisen median verkostojen kautta
Uusia sivuja aktiiviseen seurantaan sosiaalisen median kautta
Uutissivusto ei hyvä sana kuvaamaan scoopinionia
Vaikeampaa ymmärtää, miksi suositukset tulevat, koska visuaalista informaatiota tästä ei ole tarjolla

Code-Filter: Code Family "AAA: Lähteen ja suosituksen suhde ja vuorovaikutus"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:46:30

AAA: Lähteen ja suosituksen suhde ja vuorovaikutus
AAA_Käsitys sos. filt kautta tulleista artsuista
aiempi kokemus jaetusta marerialista
Aiempi kokemus jaetusta materiaalista
Facebookissa gatekeepereinä toimivien ihmisten löytäminen
Facebookissa ja Twitterissä odotus siitä että jaetaan jotain mielenkiintoista
Facebookista saatu materiaali tiettyyn aihepiiriin liittyvää

Gatekeepereiden seuraaminen facebookissa
 henkilö suodattimena
 Jakaja kommentoi artikkelia
 Jakaja toimii apusignaalina
 Joidenkin ihmisten profiiliin hakeutuminen
 Kenen mielipiteisiin luottaa missäkin asioissa vaihtelee
 kommentointi työlästä
 Lukee paljon facebookista saatua
 Lähteet sellaisia joita ei olisi muuten lukenut
 Mielikuva jakajasta saattaa vaikuttaa negatiivisesti
 Mitä enemmän toimintaa artikkelin suhteen..
 Oletus siitä, että henkilö twitterissä jakaa asiaa omien aiempien kokemusten perusteella
 Oman alan henkilöiden seuraaminen twitterissä
 Perceived expertise through interests
 Perceived expertise: kyky suodattaa
 Scoopinoinin aiempi versio: vaati ennakkotietoa henkilöstä
 Scoopinoinin vanha systeemi: Erikoistuneet henkilöt vs. massa mieltymykset
 Scoopinoinin vanha systeemi: mahdollisuus käydä katsomassa ihmisiä, joiden mielenkiinnonkohteet
 tiesi samanlaisiksi
 Scoopinoinissa kommentointi merkitsee kiinnostavuutta: vaivannäkö, toiminto?
 Seurattavat twitterissä edustavat eri aihealueita
 Sosiaalisesta mediasta samoja aiheita kuin omat kiinnostuksenkohteet ovat
 Tiettyihin lehtiin linkitys
 Tietty ihmiset jakavat mielenkiintoisempaa materiaalia
 Tietty ihmiset linkittävät tiettyyn aihepiiriin liittyviä uutisia
 Tietty ihmiset lähteenä tiettyille asioille
 Twitterissä jakajien luokittelulistoihin heidän jakamansa sisällön perusteella
 Twitterissä rakennettava oma seurattavien joukko
 Twitterissä seurattavien valinta aihepiirien mukaan
 Vaikea sanoa vaikuttaako jakaja

Code-Filter: Code Family "AAA_Sosiaalisuus skupperissa"

HU: scoopn_liitettava
 File: [C:\Users\Jesse\Desktop\Uusi kansio\scoopn_liitettava.hpr6]
 Edited by: Super
 Date/Time: 05.05.13 14:47:05

AAA_Sosiaalisuus skupperissa
 artikkelit mielenkiintoisempia jos tietty jengi eriytetty
 Englanninkielisen materiaalin lisääntyminen: synnä algoritmi, käyttäjäkunnan muutos
 Epätietoisuus tarjontaperusteesta: vaikuttavatko ystävät? (facebook-linkitys)
 Havaittu muutos facebook-linkkauksen poiston jälkeen
 Kasvottomuus tuottaa rehellistä toimintaa -> suositukset "todellisia"
 Kokemus siitä, että on osa massaa ja hyvin rajattu kontrolli tarjontaan
 Kun ihmiset piilotettu, helpompi ottaa palvelu käyttöön: kasvottomuus, koko
 Käyttäjämäärän kasvu johtanut mielenkiintoisempiin juttuihin
 Linkki oletetun ihmisjoukon vaikutuksesta suosituksiin (minä, kaverit, massa)
 Mikäli skupperissa näkyisivät käyttäjät, katsoisi nekin
 mitä kaverit lukevat
 mitä omat verkostot lukevat
 Oletus kaverien vaikutuksesta tarjontaan (facebook-linkkaus)
 Oletus oman ja kavereiden toiminnan vaikuttavuudesta tarjontaan (facebook-linkkaus)
 Oletus, että kaverit lukevat samankaltaisia

Oman sosiaalisen verkoston luvut mielenkiintoisempaa kuin massa
Scoopinion näyttää miten yhteisö on toiminut
Scoopinionin käyttöliittymä: vaikuttaa isolta
Scoopinionin priorisointi asettaa käyttäjälle suomenkielisen median alemmas
Scoopinionin suositukset: ei osaa sanoa kuinka hyvin skuuppari valitsee juttuja
Scoopparista: mikä muita on kiinnostanut
Se kuka lukee, ei ole tärkeää, vaan se että juttu luetaan: antaa yleisön päättää
SOS_Muutos palvelussa pakottaa luottamaan algoritmiin tuttavien sijaan
SOS_Algoritmi ei osaa erottaa, pitääkö lukija jostakin
SOS_Automaattisesti jaettu artikkeli ei välttämättä hyvä
SOS_Ero suosittelun ja automaattisen lukemisen välillä
SOS_Laadullinen ero automaattisen jakamisen ja suosittelun välillä
SOS_Laadullinen ero automaattisen jakamisen ja suosittelun välillä: jakajan oma arvio puuttuu
SOS_Scoopinion filteröi sisältöä ihmisten lukuajan mukaan
Sosiaalinen ryhmä muodostuu jaettujen lukutottumusten perusteella: yhteenkuuluvuus
sosiaalinen vertailu samankaltaisiin
Sosiaalisuus piilossa: uusi käyttäjä ei välttämättä ymmärrä miten artikkelit tulevat paikalle
Suositukset: aiheita, jotka eivät välttämättä kiinnosta itseä, mutta on kiinnostanut muita
Tarjonta kasvaa käyttäjämäärän mukana, mutta tämäkin näkymätöntä
Tarjonta muuttuu käyttäjämäärän kasvaessa: tämä on kuitenkin näkymätöntä, oletus muuttuneesta
käyttäjämäärästä
Toisaalta kaikkien kansalaisten tyyllisesti
Toive kontrollista: lukijakunnittain ryhmittely, liian räätälöityä sisältöä
Toive näkymästä: onko massa vai kaveripiiri lukenut
Toive sosiaalisesta komponentista: mitä kaverit lukeneet
Toiveet sosiaalisuuden esiinnostamisesta
uutiset_sosiaalisuus_keskustelunaihe

Appendix 3: Original Finnish-language versions of the examples used in the results

The examples are in the same order as they have appeared in the chapters 6 and 7.

sosiaalisen median kautta saattaa löytyä sellasia vaikka pieniä erikoistuneita blokkeja jois ei aikasemmin tai ei käy niin usein

mä lähinnä etin sellasii uutisii mitä mä en muualt nää ku siin on nää top uutiset on usein jotai tekniikkaa liittyyvii ja näin nii ne on kuitenkin sellasii juttuja jotka mua kiinnostaa mut mä en sit käy sellasil sivutoilla nii mä saan siel sellast infoo

ehkä se on sit sellanen et tai jos jotain nii ehkä se tuo sen lisän niihin mitä muuten tulis katottuu ne totutut jutut nii sit sielt tulee viel se et hei tällänenki on et täs lehdes jota sä et muuten lue nii olis tää mielenkiintone juttu nii ehkä se on sit se

jostain syystä mä päädyn tosi usein suomen kuvalehteen, mä en tiedä miten tää on mahdollista. tai sitte tota ehkä sellasiin englannin kielisiin sivuille jota en todellakaan seuraa muuten, en nyt kyllä muista nimeltä ja joo, tosi harvoin päädyn jonneki hesariin tai ylelle tai mihinkää sellaseen et en oikeestaan koskaan

designatumpaan suuntaan jossa piilotetaan kaikenlaisia vipstaakeleita ja ylimääräisiä optioita jossa niinku on funtsittu loppuun asti eikä niin että sen tarvii ite kaivella sieltä enemmänä

ku jotenki muuten on kiire nii sit se et ei tartte ite reagoida tavallaan et ne voi niinku olla siellä ja sit kattoo viikon kuluttuaki vaikka vasta läpi et mitä siel on ollu

sellaset tärkeet jutut tulee mulle kuitenkin sit muualta ennenku mä katon tätä, ku scoopinion on sellanen et se tarjoo just sellasii et vois olla mielenkiintosii ja sit mä selaan niit vähä sillee puolvakavalla mielellä pikemminki, et ehkä sen takii sil ei oo niin välii jollain tavalla

mä oon aika passiivinen siinä, et mä en ehkä hae sitä tavaraa et jos mietitään mediaa niinku uutisia ja näinpoispäin nii tota se on ehkä enemmänkin sellasta et muut tekee sen duunin et jos facebookis nousee jotain juttuja niin sitä kautta tulee tsiigattua jotain juttua et jotenki tuntuu et aika ei ehkä riitä et ite lähtis jotain haarukoimaan et mitäs uutta täällä nyt on

jotenki etukäteen pitää niinku olla suodatettu se materiaali

monia kiinnostaa tollanen ajankäytön tehokkuus ja muu laatu nii siihenhä se tarjoo monille hyviä juttuja

ku et hirvee määrä tietoa ja uutisvirtaa nii sitä kautta että joku tekee sun puolesta vähän, suodattaa ja tarjoo sulle hyviä juttuja

mä oon jotenki todennu ehkä liittyy siihen virta-metaforaan että joko pitää olla koko ajan passissa ettei missaa mitään tai sitte voi ottaa sen asenteen että joo joo, siellä menee koko ajan kamaa ja käytän sitte suodattimia joilla ne tärkeimmät loksahaa mulle

yhest lehdestä just lopetin tällasen uutiskirjeen jonka piti olla, mun mielest niil on hyviä juttuja kyllä, mut se uutiskirje on surkee, elikkä ne jutut joita mulle sielt jaettiin oli ihan, ei yhtään sopinu siis mun, elikkä mä päätin vaan et no mä käyn sit aina joskus kattoo sen nettisivuu ja katon sieltä sen lehden tietyt uutiset, tietyn alaotsikon alta,

just facebookissa pyörivät linkit on hirveen suurelta osin sellasia ihan älyvapaita uutisia, poika sai kalan, se oli iso, niinku mitä että eih että niinku mun elämä menee hukkaan jos mä klikkailen auki

ku ite ei tarvii tehdä oikein mitään, sielt rupee tulee kuitenkin suosituksia

kyl se oli se digesti et lisäs selvästi sitä -- joku kaveriviestittely on siirtyny facebookkiin mitä ennen olis laitettu sähköpostiin siis nimenomaan niinku frendien postituslistalle mut toisaalta sitte taas siitä on seurannu se nimenomaan ainaki mulla et mä oon lisänny tällasten catch up -sähköpostipalveluiden käyttöä et sensijaan et mä tavallaan avaampa selaimen jonku sivun ja menen tsekkaan sieltä sen koosteen

nii se että se pushataan mulle sähköpostina -- otan aamulla puhelimen ja tsekkaampa siitä mailit koska se on helpompaa ku kirjautua mihinkään tai käyttää miljoonaa eri ohjelmaa
 mä käyn siellä sivulla itseasiassa jos mulla on jotenki erityisen tylsää. silloin ku mä olin kipeenä viikon, mulla oli kauheen tylsää ja mä kaipasinkin lukemista nii sit menin scuupparin sivulle ja rupesin sieltä kattomaan

ku menee bussille, just esimerkiks kouluu nii sillo tulee käytyy kännykällä aina ne kaikki läpi oikeestaan kännykällä tulee tosi paljo luettua

mä käytän sitä facebookkii just nimenomaan lähinnä kännykästä koska mä käytän sitä aina kaikilla bussimatkoilla eli se on se mun viihde silloin

illalla katon sitä scoopinionia yleensä vain illalla sen takia että siellä on aina niin paljon tyrkyllä oikeesti sellasia juttuja jota mä haluisin lukee nii mä en voi kattoo sitä päivällä koska sitte mä oon töissä nii sittenhä mä syön omaa työaika

jos on joku tosi pitkä artikkeli nii mä luen sen oikeestaan kaikkein mieluiten printistä tai Ipadiltä

agregoi muitten tuottamasta sisällöstä (joo) tavallaan niinku omalla algoritmillaan sellasii suosituslistoja että eiksne kuitenkin mun ymmärtääkseni se perusidea on aika sama että. edelleen mitataan aikaa että kuinka pitkään sä oot yhdellä sivulla

alussa oli paljo sellasta et se whitelisti mitä se kattoo läpi oli liian, ehotin sinne varmaan 10 eri saittia koska se oli vaan liian suppee

tulee tosi harvoin sellanen fiilis et nyt tää puuttuu täältä

kävin mä siellä joskus lisäämässä jotain lehtiä, jotai ranskankielisiä saitteja
 mä mietin että kuinka paljon siel on niinku musta semmosta lukudataa että puhutaan ehkä niinku ja se niinku kattoo et mitä juttuja mä luen ja sit niinku yleisesti mitkä on katottu

yks ilta-sanomajuttu silloin tällön menee et voisin vaikka lukeekki mutta en halua että mul on sitten kymmenen ilta-sanomien juttua siinä

mä oon niinku ollu amnesty-aktiivi ja muuta nii sit voi olla ihmisoikeuskysymyksiä liittyviä jotka ei välttämättä oo sit sellasia jota niin paljon mahdollisesti uutisoidaan vaan ne on niinku tiettyjen uutislähteiden

Interviewer #00:03:45-7# onks sul tota jotain sellasii tiettytyyppisii aihepiirei jota seuraat vai ihan vaa näitä päivänpolttavii kysymyksiä

Respondant #00:04:05-3# kyl se ehkä painottuu enemmän sinne talous, kulttuuri, urheilua ei juurikaan, sit jotain niinku alaan liittyviä, tietotekniikka, webbielämä tai sosiaalinen media, markkinointi, sen tyyppisiä

riippuu varmaan ihmisestä onks se henkilökohtasempaa et mitä kuuntelet ku se et mitä uutisii sä luet mut mä koen ehkä sen et uutiset ja en mä tiä voiks mikro-pct sanoo uutiseks et se kertoo jo et on kiinnostunu tietotekniikasta

jos mä niinku epähuomiossa kävisin kattomassa jonku tissisaitin, nii sitten joku kattoo et mitäs se (haastateltavan nimi) lukee, et jaa sil on tämmöstä täällä

enhän mä varsinaisesti kulje tuolla sporassakaa paperilehden kanssa ja. huuda sillei viis minuuttia tätä hölmöä jutt(joo)ua ja kaks sekunttia tätä tärkeää kunnallispolitiikasta kertovaa

se saattaa lukee jostain tietystä asiasta koko ajan, nii sä voit tehdä siitä päätelmän et hei jos se vaikka jostain sairaudesta lukee nii onks sillä sellanen sairaus, esimerkiks, ja ja tota jotain täs on, jollain lähimmäisel on

on ehkä vähän vaikeempi ymmärtää et mitä parametrejä missäkin on takana et on vaan se sivu johon tulee ne uutiset ja se on sit siinä

se ei oo ihan selvää et kuinka se toimii et siel on magiaa taustalla
varmaan mä just selittäisin sen et miten siitä klikkausten määrästä päästään siihen että miten ihmiset oikeesti lukee että se oli niinku palvelu joka suosittelee laadukkaita artikkeleita ympäri maailmaa käyttäjälle

scooppari vois laittaa sinne jonkun reittauksen et oliko hyvä vai ei nii sit silloin ei tavallaan tarttis käyttää sitä plugia ja vois vaikuttaa siihen

ehkä sitä vois kuvailla sillei et se niinkun vähän niinku sillä perusteella mitä muutki lukee ja miten paljo niit on luettu ja myöskin että miten pitkälle niitä luetaan, se ei riitä että kattoo otsikon vaan, et se on pikkasen niinku tavallaan luotettavampi

voi luottaa siihen et jostain työtä liippaavista aiheista isot jutut löytää aikalailla facebook-twitter verkoston kautta tai noitten scoopparin tai newsmen circulatingin ja ja exsomniafyn

ei vielä kukaa, edes facebook oo keksiny sellasta universaali-feedia missä on sit kaikki maailman tärkeät asiat

no täytyy sanoa et en, en kauheen usein, mut varmasti päädyn lukemaan sellasia lähteitä mitä en muuten lukis

ei se välttämättä kaikille tuo niit kiinnostavii uutisii mut siin on sit aikapaljo sellasii jotka on sellasii yleisii jotka kiinnostaa sit kaikkii

etysti kaikki isot uutiset, jos jossain tapahtuu jotain. niinku nyt oli siel batman -ensi-illassa ammuttu ja sitte no varmaan aika monii kiinnostaa just jotkut uudet puhelimet tai tällaset laitteet. et joku appleki on aika iso brändi ja tällaset. sit varmaan suomes kiinnostaa joku lätkä ja. ei siel niit niin paljo tuu kyl, paitsi joskus mm kisojen aikaa mut lähinnä tommoset isot uutiset on semmosii jotka on niinku kaikkii kiinnostavii

facebookin kautta nii aika harvoin siel on mitään sellasia siis tosi paljon sellasii viihdejuttuja niinku joku ehee iltalehden joku typerä uutinen mikä niinku et sitä ei tarvii edes klikkaa auki-- pari sellasta henkilö joiden kautta, yleensä talous-sanomien tai kauppalehden linkkejä mitä mä en ite olis menny jotain kautta, mut jotka mä tosi mielellään luen ku ne ikäänkuin tarjoillaan mulle sieltä facebookista, eli ja se johtuu siitä että ne ihmiset ite on niinku talous-orientoituneita oman työnsä tai muun intressin kautta niinku laittaa semmosia fiksua ja usein kommentoi niihi myös itte

et vaik puoltuttuu on kiinnostanu tarpeeks et on kommentoinu nii sit se meinaa et se on jonkinverran kiinnostava juttu-- joku on oikeesti jaksanu jotain mielipidettäkin siitä muodostaa ja jopa näppäimistöä painella

u mä tiesin vaikka no (tyyppi profiilissa joka printattu) on hyvä tapaus, tiedän et kaveri on hiton hyvä koodari ja lukee mä tiedän, seuraan twitterissäki, tiedän et lukee tiettyntyyppisiä juttuja nii mä sit tavallaan se henkilö toimii myös sillä tavalla suodattimena et hei mäpä meen kattoo et mitä se on et tietyl taval se oli joskus hyvä mut se vaati myös sitä et mä tiesin että, tunsin sen henkilön läheisesti

sitte twitterin kautta aika samaa mitä noi, just fudis ja koris

pitää olla ihan selvyys että ne, minusta ei voi kukaan käydä läpi, musta mun lukutottumukset on yksityisiä että niitä en halua että joku voi kattoo että luen tällasta

se on must ihan kivaa et jos mun kaverit suosittelee että tää on hyvä artikkeli mut mä ihan mielelläni luen sen. mut jos mä vaan nään et näit se nyt on käyny lukemassa nii vähä tuntuu siltä että täs mä nyt sen olan yly luen ku se söi puuroa aamulla ja klikkaili näitä. et siin on mun mielestä ero, et näkeekö mitä ne lukee vai suositteleeko joku --mitä se on käyny lukemassa muuten vaan ei välttämättä oo mikään erityisen hyvää artikkeli

ei tunnu löytyvän mistään mitään hirveen kiinnostavaa nii saatan mennä skooppariin kattoo et mikä ihmisii on tälläsest pitkämuotosesta journalismista kiinnostanu enemmän

ydinidea, mihin mä nyt, mitä mä ainaki uskon vielä et se toimii, se että se oikeesti se mitä se tarjoo perustuu siihen miten minä luen asioita netissä, et se on mun mielestä pysyy samana ja sit että se selkeesti tarjoo jollain muulla eli kaikei sillä luktottumuksella et niit on oikeesti luettu niitä juttuja

mulla ei esimerkiks oo mitään käsitystä et kuinka hyvin se valkkaa niit juttuja mulle

käyttäjälle se olis enemmän semmonen että tästä löytää sellasia juttuja joita ihmiset on pitänyt lukemisen arvossina tai mihin ne on syventyny

ku sielt tulee paljon laajemmin sitä sisältöä ku näist mitä mä katon pelkästää

tuolla se menee siellä et siel voi olla puol maailmaa lukemassa ja siltä se vaikuttaakin siis niinku isoja uutisia, hyviä uutisia, kansainvälisiä juttuja

on ehkä tykänny lukee, mutta käsittääkseni myös sellasia joista välttämättä en oo tykänny lukee.

tota sillon ainakin jostakin syystä ne ihmiset on kattonu pidempään sitä juttua, eikä se perustu pelkästään klikkimääriin tai johonkin muuhun tällaseen triviaaliin mut voihan se olla että se on ollu tosi hankala käyttää se saitti ja sen takii kämmenny pitkään sil kyseisellä sivulla tai se on ladannu tosi pitkään tai jotain muuta

kukakohan sen sano et ku ihmisellä on tää naamio nii sit se sanoo et miten asiat oikeesti on et sillee kasvoton toiminta ensinnäki on rehellisempää ja sitä kautta sit saa ehkä vähä paremman kuvan kaikesta

saatan bongailta että että tää aihe ei ehkä henk koht kiinnosta mua nyt hirveesti mut et tää vois olla sellanen josta meki voitais tehdä jotain ja mä saatan merkata (joo) sen jutun tyypisesti niinku itselleni sellaseen muistilistaan että lue nää jutut myöhemmin

se on yhteisöllinen sellases isommassa skaalassa et se ei oo enää sellanen et yksilön voi ottaa sielt kohteeksi vaan sit näkyy se miten yhteisö on toiminu

ihan sama kuka sitä lukee, mut jos se uutinen luetaan ja näin nii sit se uutinen nousee ja sit annetaan sen yleisön päättää siitä

skuuppari oli enemmän yhteisö ku se on nykyää elikkä ennen siel oli selkeesti enemmän sellanen jollain tavalla, et ku ihmiset oli enemmän pinnalla nii jos luit tiettyjen ihmisten kanssa samoja juttuja, nii me ollaan jollain tavalla, jotain meis on samaa

kai se painottaa jotenki sitä mun verkostoo ku mul on siellä kuitenkin kontakkeina siis tyypejä

ein semmosen vähän myös kokeillakseni että siis mä pyysin poistamaan sen facebook-linkkauksen--mul on niinku sellanen joku alitajunen fiilis et se hieman muutti niitä tai sanotaan et niinku sinne tulee edelleen hyviä juttuja mut sit niinku yht'äkkiä tuli sellanen olo et sielt niinku jää jotain niinku pois

mä en tiedä johtuukse, mistä se niinku johtuu et mulle tulee pääasiassa englanninkielisiä, todella harvoin niinku suomenkielisiä uutisia sieltä, että johtuuko se siitä että minä ja mun kaikki kaverit luetaan niin paljon niinku tai että meil on niinku sujuvaa lukea englanninkielisiä lehtiä -- mä oon välillä vähän hämmentyny että eiks kukaan mun kaveri lue yhtään suomenkielistä mitään uutista, tai mitään ku niitä suomenkielisiä tulee niin vähän siihen mun magazineen

mua kiinnostaa enemmän mun sosiaalinen verkosto