

MARI AHVENAINEN MOBILE CROWDSOURCING OF NEWS CONTENT – PARTICIPATION PREFERENCES AND IMPLICATIONS FOR DESIGN Master of Science Thesis

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## ABSTRACT

TAMPERE UNIVERSITY OF TECHNOLOGY Master's Degree Programme in Information Technology **AHVENAINEN, MARI**: Mobile crowdsourcing of news content – participation preferences and implications for design Master of Science Thesis, 67 pages, 28 Appendix pages May 2013 Major: Usability Examiner: Professor Kaisa Väänänen-Vainio-Mattila Keywords: crowdsourcing, mobile assignment, citizen journalism, reader reporter, participation factor

Citizens participate increasingly in hyperlocal news content creation. In order to make content creation more meaningful to reader reporters and more interesting to a wider audience, it is necessary to examine the factors that influence participation and carrying out mobile assignments.

This thesis has been carried out at Tampere University of Technology, Unit of Human-Centered Technology (IHTE) in 2012. The research was carried out as part of the Next Media programme by TIVIT and funded by TEKES. The trial was conducted in cooperation with Sanoma Kaupunkilehdet. The goal of the research was to study participation preferences and motivations of readers participating in news content co-creation process.

The study included a five-week mobile crowdsourcing trial with photo assignments using Scoopshot application. The participants in the study were 104 readers of omakaupunki.fi hyperlocal news portal. Information on the factors affecting participation was collected via a web survey open for all participants and interviews of five participants.

The results of the study indicate that the participants' willingness to put effort to carrying out assignments is high and the trial was found a positive experience. Still the degree of activity was low. Many young people were participating and more suitable topics for them were wished for. The activity seems to be pleasant pastime. It is considered as a challenge or a game. Photo assignment was found the most pleasant assignment type. Also video assignments and information acquisition were of interest.

Based on the results of this study and the related literature, implications for designing mobile tasks for news content co-creation were formed. They can be adapted to other types of crowdsourcing, too.

# TIIVISTELMÄ

TAMPEREEN TEKNILLINEN YLIOPISTO Tietotekniikan koulutusohjelma **AHVENAINEN, MARI**: Mobile crowdsourcing of news content - participation preferences and implications for design Diplomityö, 67 sivua, 28 liitesivua Toukokuu 2013 Pääaine: Käytettävyys Tarkastaja: Professori Kaisa Väänänen-Vainio-Mattila Avainsanat: joukkoistaminen, mobiili, kansalaisjournalismi, lukijareportteri, osallistumiseen vaikuttavat tekijät

Lukijat osallistuvat yhä enemmän paikallisen uutissisällön luontiin. Jotta sisällön tuottaminen olisi lukijareporttereille mielekkäämpää ja sisältöä saataisiin laajemmalle yleisölle kiinnostavaksi, on syytä tutkia mitkä tekijät vaikuttavat osallistumiseen ja mobiilitehtävien tekemiseen.

Tämä diplomityö on toteutettu Tampereen teknillisen yliopiston Ihmiskeskeisen teknologian yksikössä (IHTE). Tutkimus on tehty osana TEKES:n rahoittamaa TIVIT:n NextMedia-ohjelmaa yhteistyössä Sanoma Kaupunkilehtien kanssa. Tutkimuksen tavoitteena oli selvittää osallistumiseen vaikuttavat tekijät ja niiden seurauksena mobiilitehtävien suunnitteluun vaikuttavat tekijät lukijareportteritoimintaan liittyen.

Tutkimukseen kuului viiden viikon mobiilijoukkoistamiskokeilu, jossa lähetettiin kuvaustehtäviä Scoopshot-sovellusta käyttäen. 104 Omakaupunki.fipaikallisuutisportaalin lukijaa osallistui tutkimukseen. Tietoa osallistumiseen vaikuttavista tekijöistä kerättiin kaikille osallistujille avoimella nettikyselytutkimuksella sekä viiden osallistujan haastatteluilla.

Tutkimuksen tulokset osoittavat, että osallistujat ovat halukkaita panostamaan tehtävien tekemiseen ja kokeilu koettiin positiiviseksi. Kuitenkin tehtäviin osallistumisaktiivisuus oli alhainen. Tutkimukseen osallistui paljon nuoria, ja enemmän heille sopivia aiheita toivottiin. Tehtävien tekeminen vaikuttaa olevan mieluista ajanvietettä. Sitä pidetään haasteena tai pelinä. Tehtävätyypeistä mieluisin oli kuvaustehtävä. Myös videointitehtävät ja infomaation hankinta kiinnostivat.

Tämän tutkimuksen tulosten ja aiheeseen liittyvän kirjallisuuden perusteella on koottu suuntaviivat mobiilitehtävien suunnittelua varten. Ne pätevät soveltuvin osin myös muuhun joukkoistamiseen kuin uutissisällön tuottamiseen.

# PREFACE

This thesis has been carried out at Tampere University of Technology, Unit of Human-Centered Technology (IHTE) in 2012 as a part of the Next Media programme by TIVIT and funded by TEKES.

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Tampere, April 22, 2013

Mari Ahvenainen

# CONTENTS

Abst	tract.			i
Prefa	ace			iii
Tern	ns an	d abbrevi	iations	vi
1	Intro	oduction		1
	1.1	Objectiv	ves and methods	1
	1.2	Structure	e of the thesis	2
2		U	ed content	
	2.1	Introduc	tion to user-generated content (UGC)	3
	2.2	UGC in	news reporting	3
3	Crov	wdsourcir	ng	5
	3.1	Introduc	tion to crowdsourcing	5
	3.2	Motivati	ions for participation	7
	3.3	Gamifica	ation and games with a purpose (GWAP)	10
	3.4	Mobile c	crowdsourcing	12
	3.5	Factors a	affecting participation	13
4	Enal	oling tech	nnologies	16
	4.1	State-of-	-the-art review of applications and tools for crowdsourced	news
	repo	rting		16
		4.1.1 \$	Services for creating photos, videos and stories	18
		4.1.2 \$	Streaming media	19
		4.1.3 \$	Social media	19
	4.2	Scoopsh	ot	20
		4.2.1 U	Users	20
		4.2.2 N	Material	21
		4.2.3 A	Assignments	21
		4.2.4 F	Payment and rights	23
5	Met	hods		25
	5.1	Setup of	the study	25
	5.2	Recruitn	nent of participants	25
	5.3	Apparatu	us	27
	5.4	Data col	lection methods	28
		5.4.1 F	Field study	28
		5.4.2 (	Questionnaire	29
		5.4.3 I	Interviews	31
	5.5	Analysis	5	32
6	Resi	ılts		33
	6.1	Respond	ling to the assignments	33
	6.2	Question	nnaire results	35
		6.2.1 F	Respondents	35
		6.2.2 F	Former participation	36

		6.2.3	The trial		
		6.2.4	Carrying out assignments		
		6.2.5	Assignments		
		6.2.6	Context of use		
		6.2.7	Suitability of Scoopshot		
		6.2.8	Ideas and feedback		
	6.3	Intervi	ew results		
		6.3.1	Interviewees		
		6.3.2	Photographing background		
		6.3.3	Participation		
		6.3.4	Motivation		
		6.3.5	Scoopshot		
		6.3.6	Material and location information		
		6.3.7	The trial		
		6.3.8	Assignments		
		6.3.9	Scenarios		
7	Sun	mary a	nd Discussion		
	7.1	Summ	ary		
	7.2	Implic	ations for design		
	7.3	Self re	flection		
8	Con	clusions	s and future work		
Refe	erenc	es			
App	endiz	xes			
	App	endix A	A: Assignments of the Scoopshot trial		
	App	endix B	: Online questionnaire		
	App	endix C	: Themes of the online questionnaire		
	Appendix D: Assignment descriptions questionnaire				
	Appendix E: Quality attributes				
	App	endix F	: Interview structure		
	App	endix C	B: Scenarios		
	App	endix H	I: Groups of coded interview data		
	App	endix I:	Categorized trial descriptions		
	App	endix J	: Feedback from the trial		

# TERMS AND ABBREVIATIONS

AR	Augmented reality.
BBC	The British Broadcasting Corporation.
САРТСНА	Completely Automated Public Turing Test To Tell Com- puters and Humans Apart. A test only human can pass.
Citizen journalism	Ordinary people performing tasks traditionally carried out by professional journalists.
Crowdsourcing	Outsourcing tasks to crowds.
Gamification	Use of game-thinking and game mechanics in non-game contexts.
Hyperlocal	Small, geographically defined community, such as a village or a quarte.
MMS	Multimedia messaging service.
Mobile assignment	Assignment accessed with smart phones or other mobile devices.
Mobile task	See Mobile assignment.
MORI	Market & Opinion Research International.
Participatory journalism	See Citizen journalism.
Public journalism	See Citizen journalism.
Reader reporter	Person participating in news content co-creation process by submitting material, such as photos and stories.
RQ	Research question.
SMS	Short message service.
Ubiquitous	Existing or being everywhere at the same time.

UCC	User-created content. Media content created, contributed
	and distributed by non-professional web users.
UGC	User-generated content. See User-created content.

# **1** INTRODUCTION

The evolution of news production in the last twenty years has brought the whole world's news available to practically all. This has not, however, removed the need for local news. Digitalization of media has conversely paved the way for public and local journalism, where professional media, citizens' own media (blogs, Twitter, Facebook) and many other content providers transmit, process, and lend each other's outputs. Besides digitalization, the change has been accelerated by revenue logic changes of traditional media, mobilization and the desire of people to hear each other's stories. And, as it is often with news, the story born near the reader is the best story to interest the reader.

Hyperlocal news is aimed at small communities, such as a village, and the content is usually created in co-operation with the readers. Metzgar et al. (2011) proposed the following as a definition for hyperlocal media operations:

"Hyperlocal media operations are geographically-based, communityoriented, original-news-reporting organizations indigenous to the web and intended to fill perceived gaps in coverage of an issue or region and to promote civic engagement." (Metzgar et al. 2011)

Citizens provide newsrooms with material, such as photos, stories and tips of local events. Assisting newsrooms is not an activity of just a small group of people. According to Parkkonen (2013) more than 30000 citizens assisted Sanoma Kaupunkilehdet in news creation process by submitting more than 35000 photos in 2012. Approximately 10 % of the reader reporters were rewarded.

This thesis presents the research results of a crowdsourcing trial using mobile assignments in hyperlocal news content creation. The research was carried out at Tampere University of Technology, Unit of Human-Centered Technology (IHTE) in 2012. The trial was conducted together with Sanoma Kaupunkilehdet.

## 1.1 Objectives and methods

The goal of the research was to study participation preferences and motivations of readers participating in news content co-creation process. The main research questions were the following:

RQ1: What factors affect participation in crowdsourcing activities? RQ2: What implications are found for future design concerning the usage of mobile assignments in reader reporter activities? In the research we studied participation preferences and motivations of the readers of Omakaupunki.fi, Vartti and Metro (metro.fi). From the results implications for future development were accumulated. The study included a trial with photo assignments using mobile devices. After the trial period of five weeks with 104 participants the perceptions were surveyed with an online questionnaire open for all the participants followed by interviews of five participants.

## 1.2 Structure of the thesis

The structure of the thesis is the following. The thesis begins with an introduction to user-generated content and its role in news reporting in chapter 2. The next chapter, chapter 3, introduces crowdsourcing and crowd workers' motivations and preferences for participation. Chapter 4 gives an overview on the enabling technologies used in crowdsourced news reporting. Chapter 5 consists of the methods used in the field study. The results of the study are presented in chapter 6. In chapter 7, the results are discussed and implications for design are presented. The chapter also includes ideas for future development. Chapter 8 concludes the study.

# 2 USER-GENERATED CONTENT

The Internet is flooded with material from different sources. Most of the material uploaded daily comes from ordinary citizens. This chapter gives an overview on usergenerated content and how it is adopted in news reporting.

## 2.1 Introduction to user-generated content (UGC)

The speed of technological development has been vast for the last decades and nowadays the Internet is accessible all over the world. Also the distribution of content is becoming available to anyone and, by implication, content creation as a pastime activity has become increasingly popular.

User-generated content (UGC) or user-created content (UCC) means content that is created, contributed and distributed by non-professional web users. Wunsch-Vincent & Vickery (2006) define UCC in their study of participative web as follows:

"i) content made publicly available over the Internet, ii) which reflects a certain amount of creative effort, and iii) which is created outside of professional routines and practices". (Wunsch-Vincent & Vickery 2006)

For example, blogs and wikis are user-generated content. Probably the best known pieces of UGC are Wikipedia and Youtube. Enthusiastic users regardless of age or gender upload their text, photos, videos and other material to be seen by other users. Social media, Youtube and other applications assist in distribution of content.

### 2.2 UGC in news reporting

Attitudes to UGC have changed during the last few years both on the newsroom and reader reporters' side. Using UGC in news has become more important because of the material's availability, cost-effectiveness and authenticity. On the other hand, the vast amount of UGC is causing extra work for the newsrooms when identifying the usefulness and genuineness of the material especially during times of natural disasters or other catastrophes.

Hänska-Ahy & Shapour (2012) studied what had changed in the routines and attitudes of newsroom professionals during the time between Iran's election protests in 2009 and Arab uprisings in 2011. They found that the journalists had grown more familiar and comfortable about using UGC in news process and UGC had become essential to news work. The routines and practices of processing UGC had changed both on newsroom's and content creators' side. More detailed policies on the use of UGC were introduced and that helped the journalists' verification process of UGC. UGC creators produced photos and videos with better quality and details like date, time and location of the material. That brought more useful material available. However, almost all journalists taking part on the study would prefer to have professionals on the scene than use only content of non-professionals.

Lai (2011) studied why the photographs taken by citizen journalists seem to be more trustworthy for readers than those taken by professional photographers. She reported ten reasons for this: 1) citizens present another perspective, 2) they are what-you-see-is-what-you-get photos, images are 3) ordinary, 4) most authentic and straightforward, 5) not manipulated, 6) taken from citizen's perspective, 7) citizens experienced the trauma themselves, 8) they want to share the experience, 9) their intentions are to distribute the information and 10) they are not for the money.

Wardle & Williams (2008) studied how UGC is used within the BBC, how UGC is perceived by journalists and senior managers, the motivations of contributors and the attitudes of the general audience to the increased use of UGC in news. Their study included newsroom observation in nine newsrooms, 115 interviews with BBC journalists and 10 interviews with senior managers and BBC executives, an analysis of 105 hours of broadcast output, a MORI survey with 944 participants, an online survey of 695 BBC contributors and twelve focus groups with 100 people. According to Wardle & Williams respondents held mixed opinions about which news material is more trustworthy, the material produced by professional journalists or the material sent by the public. The respondents were in favour of the readers being involved in news creation rather than leaving it only to professionals. They also thought that news organisations use more UGC now than they used to.

# 3 CROWDSOURCING

The growth of crowdsourcing has been tremendous in recent years. The word crowdsourcing is on everyone's lips. Chapter 3.1 introduces the term and different forms of crowdsourcing. Motivations for participation are opened in chapter 3.2. Also gamification has increasingly been added to crowdsourcing to make it more appealing. Chapter 3.3 gives an overview on gamification and games with a purpose. Mobile crowdsourcing is introduced in chapter 3.4 and factors affecting participation in chapter 3.5.

### 3.1 Introduction to crowdsourcing

Crowdsourcing is a form of online collaboration where an activity is outsourced to the general public. The activity can be, for example, photographing, coding, image tagging or data acquisition. Sometimes the person doing the activity is compensated for it, but often it is performed on voluntary basis.

The term crowdsourcing was first published by the Wired Magazine in 2006. Howe defined crowdsourcing as outsourcing tasks to a crowd (Howe 2006). Since 2006 several definitions of crowdsourcing have been published.

Estellés-Arolas & González-Ladrón-de-Guevara (2012) conducted a study for integrating a definition for crowdsourcing. They analyzed systematically existing definitions of crowdsourcing from 209 documents of four different databases. From the analysis of the definitions they identified three elements: 1) crowd, 2) initiator and 3) process. For the elements they found eight characteristics (see Table 1). The crowd is a group of individuals whose characteristics are clearly defined, and a task with a clear goal and recompense exists. The initiator of the task and the benefit received by the initiator are clearly defined. The crowdsourcing process is assigned online and it involves the participation of the crowd. The medium used is the Internet.

The crowd	The initiator	The process
There is a clearly defined	The crowdsourcer (initiator)	It is an online assigned
crowd.	is clearly identified.	process of participative type.
There exists a task with a clear goal.	The compensation to be received by the crowdsourcer is clearly defined.	It uses an open call of variable extent.
The recompense received by the crowd is clear.		It uses the Internet.

Table 1. Characteristics of the elements of crowdsourcing definitions (based on the listing in Estellés-Arolas & González-Ladrón-de-Guevara 2012).

As a result of their study Estellés-Arolas & González-Ladrón-de-Guevara presented the definition for crowdsourcing as follows:

"Crowdsourcing is a type of participative online activity in which an individual, an institution, a non-profit organization, or company proposes to a group of individuals of varying knowledge, heterogeneity, and number, via a flexible open call, the voluntary undertaking of a task. The undertaking of the task, of variable complexity and modularity, and in which the crowd should participate bringing their work, money, knowledge and/or experience, always entails mutual benefit. The user will receive the satisfaction of a given type of need, be it economic, social recognition, self-esteem, or the development of individual skills, while the crowdsourcer will obtain and utilize to their advantage that what the user has brought to the venture, whose form will depend on the type of activity undertaken." (Estellés-Arolas & González-Ladrón-de-Guevara 2012)

Howe (2009) introduces four categories of crowdsourcing: 1) collective intelligence, or crowd wisdom, 2) crowd creation, 3) crowd voting, and 4) crowdfunding. *Collective intelligence* comes from groups that have more knowledge than individuals. Howe gives an employee suggestion box as a simple example of collective intelligence. An open innovation company InnoCentive is an example of using collective intelligence (InnoCentive 2013) in business world. *Crowd creation* means outsourcing creative tasks, such as photographing or designing, to crowds. An example of crowd creation is iStockphoto (see Table 4). *Crowd voting* is used to organize information, but does not have to contain actual voting by the crowds. For example, Google's search results are used for indicating the most popular articles. *Crowdfunding* can be used as a financial source for some project or initiative that would not easily get funding otherwise. An example of this kind of an initiative is non-profit organization Kiva that collects lending money through its portal and gives microloans to people in developing countries (Kiva 2013).

Crowdsourcing has been successfully used in various areas, including open source coding, translating and graphic designing. Some crowdsourcing platforms allow practically anyone to initiate a task to be assigned to crowds. One of these platforms is Amazon's Mechanical Turk (Amazon 2012) offering more than 200 000 human intelligence tasks, HITs. The tasks vary from finding companies' contact information and identifying car types from images to audio transcription and evaluating user experience. The tasks are available for qualified registered workers, also called as providers, and they get paid for tasks the requester approves.

Crowdsourcing activities can also be hidden from the participants. For example, some spam companies use their unaware customers in a process of getting free email

accounts that they need for spamming. Companies offering free email services have put captchas, tests that only humans can pass, to their registration forms in order to prevent abuse. Some spammers have bypassed this as follows. A program fills in the registration form, passes the captcha to a customer willing to see the next image on the spam company's site, the customer solves the captcha and gets access to the next image while the solution for the captcha is passed to email registration form and an email account is created. (Von Ahn 2006).

### 3.2 Motivations for participation

Motivation is the force that makes people behave in a certain way. Ryan and Deci (2000) state that "to be motivated means to be moved to do something". They distinguish motivation between intrinsic and extrinsic motivation. Intrinsic motivation is affecting when performing something because one finds it interesting or gets enjoyment of it. When a person is performing something to achieve a separate outcome, such as a reward, the motivation is extrinsic. According to the Self-Determination Theory (SDT) of Ryan and Deci intrinsic motivation is self-determined whereas amotivation, unwillingness, is nonself-determined and extrinsic motivation lies in between.

Motivations for participation in crowdsourcing activities vary. Buehner et al. (2012) studied the motivations of citizen photojournalists. They interviewed 19 content creators of You-Witness-News at Flickr. They found two categories of photojournalists in terms of motivation: 1) intentional and actively seeking and 2) randomly acting photojournalists. The first group searches intentionally and actively for photojournalistic opportunities and they do not mind travelling or spending time for the activity. The second group acts randomly. They do not travel for the newsworthy events, but if they happen to be in the right place at the right time they will take a photo. Also Väätäjä (2012) recognized these two participant groups in her study. She named the groups as "hunters" and "snappers".

The motivations Buehner et al. revealed they broke into six categories as illustrated in Figure 1.

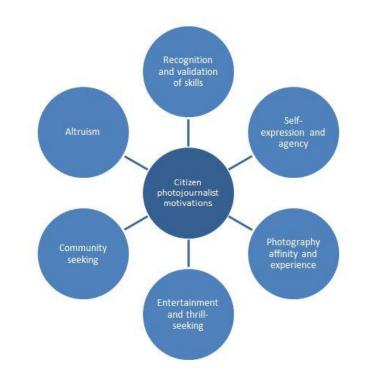


Figure 1. Citizen photojournalist motivations (based on the research of Buehner et al. 2012).

The categories are 1) *recognition and validation of skills*, for example, by receiving comments from others or getting one's photo published, 2) *self-expression and agency*, being free from professional constraints, 3) *photography affinity and experience*, 4) *entertainment and thrill-seeking*, 5) *altruism*, such as helping local newspapers in lacking resources, and 6) *community seeking*.

Also rewarding as a motivation factor comes up in studies. In the study of Alt et al. (2011) users preferred assignments that were paid for. Väätäjä et al. (2011) found in their study that rewarding is essential for motivation. Rewarding had come up spontaneously in interviews of reader reporters participating the study. Väätäjä (2012) studied readers' motivations to participate in hyperlocal news content creation. First results of their questionnaire with 39 respondents indicated that an opportunity to get a reward and fun seeking were equally important motivations to submit photos. The motivations of "hunters" and "snappers only" differ from each other. "Hunters" were more motivated by the opportunity for extra income and skills development whereas fun was the most reported motivation for "snappers only".

In Brabham's (2008) study on the motivations of iStockphoto (see Table 4) members the most popular motivations for participation were the opportunity to earn money and improving one's creative skills. The data was collected via an anonymous online survey that gained 651 responses. Also Brabham's (2010) interviews of 17 Threadless (www.threadless.com) users indicate that the opportunity to make money, improving one's creative skills and the opportunity for freelance design work were important motivations. In addition the interviewees loved the Threadless community, some of them even having an addiction to it. Money, love and glory are the motivation factors presented by Malone et al. (2010) in their study of collective intelligence systems. Money can be direct payments or future payments after enhancement of professional reputation or improvement of skills. Love includes intrinsic enjoyment, socializing with others and contributing to a cause. Glory is recognition by the peers. They point out that appealing to love and glory can reduce costs and that providing money and glory can influence group's direction and speed.

Wardle & Williams' (2008) study at the BBC indicated that more than a half of the participants sent material as a response to something they had heard or seen on the news and one third wanted to bring a particular issue to people's attention. Väätäjä et al. (2011) found that in addition to rewarding other important motivations were sharing one's photos and informing about local issues.

Borst (2010) studied the effects of motivation and rewards on participation and performance of volunteers in online communities. She found intrinsic motivations, such as pleasure and challenge, as important drivers of participation and performance. They had positive effects both on the decision to contribute and on the quantity and novelty of contributions to the online communities. The study also revealed that the absence of rewards has negative effects on extrinsic motivations on participation and performance whereas the presence of rewards affect positively only if the reward criteria is related to the performance.

Lakhani et al. (2007) found that people who work on problem solving for InnoCentive (www.innocentive.com) are more driven by intrinsic motivators, such as enjoying problem solving and cracking a tough problem, than winning a monetary prize. They also highlight that those who were participating on their free time were more likely the winning solver that those participating due to career and social motivations.

According to Deci et al. (1999) in some tasks rewards are predicted to undermine intrinsic motivation. Chandler & Kapelner (2012) found that meaningful tasks have the opposite effect. They studied the relationship between meaningfulness of a task and worker effort with about 2500 workers of Amazon's Mechanical Turk (MTurk, see Chapter 3.1). They found that meaningful tasks got more participants, both the quality and quantity of their output were higher and the compensation required was lower than of tasks with low meaning. Similar findings were reported by Rogstadius et al. (2011) from their study with MTurk workers. They also found that higher payment leads to quicker results. They pointed out that work accuracy can be improved through intrinsic motivators, especially when extrinsic motivation is low.

Motivations for participation in crowdsourcing activities found in studies are tabulated in Table 2. The motivations were categorized according to the model of Buehner et al. (2012) added with rewarding.

Motivation	Description	Studies
Recognition and	Comments from other photo-	Brabham (2008), Buehner et al.
validation	journalists, getting one's	(2012), Lakhani et al. (2007), Malone
	photos published	et al. (2010)
Self-expression	Sharing one's interests,	Brabham (2008, 2010), Buehner et al.
and agency	desire of being a professional	(2012), Väätäjä et al. (2011), Väätäjä
	photojournalist	(2012)
Affinity and	Attraction to photography,	Brabham (2008, 2010), Buehner et al.
experience	developing skills	(2012), Malone et al. (2010), Väätäjä
		(2012)
Entertainment and	Enjoyment of the action	Alt et al. (2011), Borst (2010), Brab-
thrill-seeking		ham (2008), Buehner et al. (2012),
		Lakhani et al. (2007), Malone et al.
		(2010), Väätäjä (2012),
Altruism	Helping local newspapers in	Buehner et al. (2012), Chandler &
	lacking resources, informing	Kapelner (2012), Lakhani et al. (2007),
	of local issues	Malone et al. (2010), Rogstadius et al.
		(2011), Väätäjä et al. (2011), Väätäjä
		(2012), Wardle & Williams (2008)
Community	Sharing of photos with other	Brabham (2008, 2010), Buehner et al.
seeking	photojournalists, getting	(2012), Lakhani et al. (2007), Malone
	comments from one's peer	et al. (2010)
Rewarding	Instant monetary reward or	Alt et al. (2011), Borst (2010), Brab-
	other compensation, future	ham (2008, 2010), Buehner et al.
	payments after enhancement	(2012), Lakhani et al. (2007), Malone
	of professional reputation or	et al. (2010), Rogstadius et al. (2011),
	improvement of skills	Väätäjä et al. (2011), Väätäjä (2012),
		Wardle & Williams (2008),

Table 2. Motivations for participation in crowdsourcing activities.

Kaufmann et al. (2011) proposed a model for worker's motivation in crowdsourcing by adapting different models from classic motivation theory, work motivation theory and open source software development. They first classify motivations as intrinsic and extrinsic type. Intrinsic motivations have two categories: 1) enjoyment-based and 2) community-based motivations. Extrinsic motivations they divided into three categories: 1) immediate payoffs, 2) delayed payoffs, and 3) social motivation. Each category has one or more constructs. For example, enjoyment based motivation is influenced by pastime, which means that a worker is doing something in order to avoid boredom.

## 3.3 Gamification and games with a purpose (GWAP)

Gamification is the trend of the moment. It has also been added to crowdsourcing activities. Before defining gamification, it is important to understand the definition of game. Salen & Zimmerman (2004) compared definitions of game from eight earlier studies and ended up with the following: "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." (Salen & Zimmerman, 2004)

A system is a set of parts interrelating to form a whole. One or more players interact with the system. Artificial conflicts are contests of power that happen out of real life. The contests can occur between players or between a player and a system. Rules are crucial to delimit what a player can and cannot do. Quantifiable outcome is the result of a game. A player can win, lose or receive a numerical score.

Gamification means using of game-thinking and game mechanics in non-game contexts. Huotari & Hamari (2012) defined gamification as follows:

> "Gamification refers to a process of enhancing a service with affordances for gameful experiences in order to support user's overall value creation." (Huotari & Hamari 2012)

In crowdsourcing activities gamification can be used, for example, by giving the participant a new assignment only after completing the preceding or by announcing a score table of the most productive contributors. On the other hand, the whole activity can be in a form of a game. A human-based computation game or a game with a purpose (GWAP) is a game, where people playing perform basic tasks that computers are unable to perform (Von Ahn & Dabbish 2008).

An example of games with a purpose is the ESP Game (Von Ahn & Dabbish 2004, 2008). The idea is to train computers to recognize images. The game is played online by two simultaneous players who does not know each other and cannot communicate with each other. The players are both given the same image and they are expected to describe the image with one word. The goal of the game is to type the same word as the coplayer.

Another successful example of GWAP initiatives was called Digitalkoot, Digital Volunteers (The National Library of Finland 2012). More than 100 000 volunteers carried out word recognition tasks to verify the digitized historical newspaper archive of The National Library of Finland. The recognition tasks were carried out by playing online games. The scanned material was first run through an automatic text recognition program and words that were unrecognized by the program were selected for the games. There were two games to play. In the first game a player was given two words to verify if they were the same or not. After answering the player received another two words. The other game gave a player an unrecognized word and by writing the correct word the player could build a bridge for a mole.

### 3.4 Mobile crowdsourcing

People all over the world are increasingly using mobile devices in connecting to the Internet. At the same time more and more advanced applications for smart phones and tablets become available. Computing has become ubiquitous. Where ever you are, with just a click of a button, for example, your videos and photos can be shared with millions of others.

Also crowdsourcing has become ubiquitous. Ubiquitous crowdsourcing has been used in measuring and mapping urban noise pollution (Stevens & D'Hondt 2010), improving vehicular mobility (López Guillén et al. 2011) and election monitoring (Hellström & Karefelt 2012), to mention a few.

New mobile crowdsourcing platforms are being built, Scoopshot (see Chapter 4.2) being the latest 'world conqueror' for sending mobile assignments to smart phone users. Mobile assignment or mobile task is an assignment accessed with mobile phones or other mobile devices. For example, a school teacher can create mobile assignments and send them via SMS to his students to be carried out, or a worldwide news company willing to publish user-generated content can send mobile assignments to all its readers using a specific mobile application. In this document, words assignment and task are used for mobile assignments.

In developing countries there are billions of people living with very low income and willing to earn some extra money carrying out simple tasks, such as translating words or recognizing letters. In those countries it is common to have a low-end mobile phone with no connection to the Internet, therefore not all of the mobile crowdsourcing platforms are designed for smart phones. Successful examples of these platforms are txteagle (Eagle 2009) and mClerk (Gupta et al. 2012). They both use SMS messages in sending tasks and receiving the outcome.

Existing research and academic articles on crowdsourced news reporting with mobile assignments are limited. Väätäjä et al. (2011) studied mobile users' experiences by conducting a quasi-experiment in field conditions with nineteen participants. Locationbased assignments were sent to the participants via SMS. The submission of the created material was done using either MMS or a dedicated mobile client for photo and video. The client had also capturing features. Their findings indicate that SMS messages were easy and handy means for receiving assignments. The mobile client was perceived simpler and more reliable than MMS for submission of multimedia content.

An example of a mobile assignment process in news journalism (see Figure 2) is as follows: 1) a journalist creates a photo assignment with a reward of five euros. 2) She selects the recipient group and the assignment is sent to the recipients. The selected group receives the assignment and some of them read it. 3) Some recipients choose to contribute and submit photos to the assignment using mobile application. The journalist writes a story and 4) selects photos to be used with the story. 5) The photographers whose photos were selected are compensated. 6) The journalist decides to use one of the bought photos to be published with the story in the newspaper.

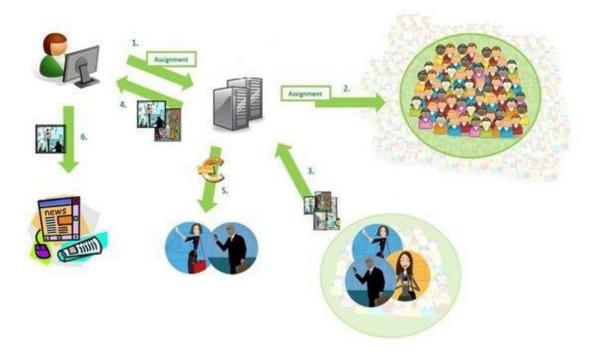


Figure 2. An example of a mobile assignment process.

The previous example is of crowdsourcing news photos. Assignment types, incentives and output of the process vary, but similar kind of process applies also to other activities using mobile assignments.

## 3.5 Factors affecting participation

Like motivations for participation also factors affecting participation vary. Some participants prefer assignments close to their homes in the evening; others prefer assignments while shopping in the city centre during the day. Participants' preferences are different depending on, for example, their possibilities of travelling or free time to spend.

Schulze et al. (2011) studied which task properties are important for Mechanical Turk worker's and influence HIT (Human Intelligence Task) selection. They conducted five preliminary surveys before the main survey. The results indicated that the top three properties were high reward per hour, HIT sounds interesting / enjoyable and simplicity of HIT. Some cultural differences occurred in ranking the properties, but the level of education did not have an effect on task property preferences. Schulze et al. grouped the properties into three categories and found descriptions for the workers rating the categories highly. They are 1) quick profit jobbers, 2) informed workers, and 3) challenge seekers. The factors affecting participation in crowdsourced news content creation have not been widely studied.

Väätäjä et al. (2012) studied participation preferences and concerns of using location-based assignments in crowdsourced news reporting. In their first study nine reader reporters who had been recently rewarded for a photo were asked about their perceptions on location-based assignments and geotagging in crowdsourced news reporting. Six of the participants were interviewed and three of them answered the same questions via an online questionnaire. Their second study included a quasi-experiment with four location-based assignments followed by an interview and a questionnaire of the participants' experiences and preferences. The second study had nineteen participants. As an outcome of the two studies, they defined an initial framework with seven dimensions for the preferences of reader reporters to participate and receive location-based assignments: 1) organization type, 2) task type, 3) temporal context of the participant, 4) location to receive location-based assignments, 5) precision of the location query, 6) situation (social and task context) and 7) incentives. Their findings indicate that all other dimensions affect but organization type the willingness to receive location-based assignments.

Alt et al. (2011) studied how crowdsourcing can be extended beyond the digital domain. They developed a prototype platform to create and distribute location-aware assignments and a mobile application to search and carry out assignments. They conducted two field studies in users' natural environment. In both studies they had nine participants. They report that users prefer address-based assignment selection to location-based. Users searched for assignments near home and surrounding areas during midday breaks and solved them after work. They preferred tasks without temporal constraints. Picture tasks were the most favoured tasks against informative tasks and action tasks in the first study. In the second study picture tasks and informative tasks were equally preferred.

	Factor		Studies
Physical context	Location	Near home, in the city	Alt (2011), Väätäjä et al.
		centre, on route	(2012)
	Location infor-	Private, public	Alt (2011), Väätäjä &
	mation		Egglestone (2012),
			Väätäjä et al. (2012)
	Distance		
Task context	Situation	On freetime, during a	Alt (2011), Väätäjä et al.
		school day	(2012)
Temporal con-	When	Summertime, weekdays,	Alt (2011), Väätäjä et al.
text		weekends, morning	(2012)
	How long		Alt (2011)
Social context	When	Alone, with company, in a crowd	Väätäjä et al. (2012)
Technical and	A		
Technical and	Apparatus	Mobile application, SMS	Alt (2011), Väätäjä et al.
information			(2011)
context			
Assignment	Theme	Interestingness	Schulze et al. (2011)
properties	Description	Further information, sim-	Schulze et al. (2011),
		plicity of task	Väätäjä & Egglestone
			(2012)

#### Table 3. Factors affecting participation.

Туре	Photo, video, information	Alt (2011), Väätäjä &
	acquisition	Egglestone (2012),
		Väätäjä et al. (2012)
Location		Alt (2011), Väätäjä &
		Egglestone (2012),
		Väätäjä et al. (2012)
Validity	Hours, days, weeks	Alt (2011), Väätäjä &
		Egglestone (2012)
Priority	High, normal, low	Alt (2011)
Compensation	Commendation, money,	Alt (2011), Schulze et
	movie tickets	al. (2011), Väätäjä et al.
		(2011), Väätäjä et al.
		(2012)
Number of		Väätäjä & Egglestone
recipients /		(2012)
contributors		

Factors affecting participation collected from the studies are tabulated in Table 3. They are sorted according to a model of Context of Use in Human-Mobile Computer Interaction (Jumisko-Pyykkö & Vainio 2010) added with assignment properties.

# 4 ENABLING TECHNOLOGIES

This chapter introduces applications and tools used for crowdsourced news reporting. Scoopshot is covered in more detail, because it was used in this study for receiving mobile assignments and submitting content.

# 4.1 State-of-the-art review of applications and tools for crowdsourced news reporting

There are plenty of different types of mobile applications that can be used for crowdsourced news reporting. Some examples of them (see Table 4) are introduced later in this chapter. In addition to the ones available for everyone, some news organizations, for example CNN (http://ireport.cnn.com), have applications especially tailored for their needs.

ΤοοΙ	Description	User actions	News reporting
Twitter	Online social	Send and read text-	Tweet breaking news,
twitter.com	networking and	based posts of up to	search, RSS feed,
	microblogging service	140 characters, known	follow other tweeters,
		as "tweets", send	call for content
		photos, follow other	
		tweeters	
Facebook	Online social	Post and read short	Publish news on one's
facebook.com	networking service and	stories, pictures, video,	Facebook profile or
	website	follow other users, play	public pages, follow
		games	other users or pages
Scoopshot	Mobile crowdsourcing	Carry out	Media companies can
scoopshot.com	application allowing	assignments, send	buy news photographs
	users to capture and	spontaneous news	from all over the world,
	sell photos and videos	photos and videos for	set up location-aware
	to the media	sale	assignments to
			registered users or
			hire freelancers
			directly
iStockphoto	Online shop selling	Upload photos, videos,	Media companies can
istockphoto.com	users' photos and	illustrations, audio to	buy material, such as
	other material. Mobile	be sold	photographs and
	application available		videos royalty free.
	for searching content.		

Table 4. Examples of applications used for crowdsourced news reporting.

Ushahidi ushahidi.com	Crowdsourcing platform for crisis information collection, visualization and interactive mapping	Report incidents via a mobile application, SMS, mail, Twitter and other channels, and plot them on an online map	Used, for example, when an earthquake hit in Haiti for organizing searching troops
Meporter meporter.com	Citizen journalist smartphone application that uses geolocation and multimedia to create hyperlocal, real-time news	Post news with headlines, text, videos, and images to the Meporter database and to the Meporter website, follow other users	Read stories, follow users
Bambuser bambuser.com	Interactive mobile video streaming platform	Stream and share live video using a smartphone or a PC with a webcam, follow other users	Watch and share vide- os of other users, follow users
<b>Qik</b> qik.com	Mobile live video streaming and two- way video conferencing application	Stream video from phone, share live or recorded video, mobile video chat and mail	Watch and share videos of other users, follow users

The costs of usage and rewarding methods of crowdsourcing tools introduced are listed in Table 5.

Table 5: Costs of usage and rewarding methods of crowdsourcing tools.

ΤοοΙ	Cost for a user	Cost for the media	Monetary rewarding	Non-monetary rewarding
Facebook	Free of charge	Free of charge	None	Likes, shares, followers
Twitter	Free of charge	Free of charge	None	Shares, followers
iStockphoto	Free of charge	Charge by the material bought	15% - 45% of each file downloaded	Six membership levels, icons
Scoopshot	Free of charge	Charge by the photos bought	Spontaneous: Set by the user Assignment: Set by the initiator	None
Ushahidi	Free of charge	Free of charge	None	None
Meporter	Free of charge	Free of charge	Stickers, T- shirts etc. with "Press Passes"	"Press Passes"
Bambuser	Free of charge	Non-profit: Free of charge	None	Likes, views, live views,

		Commercial		Facebook likes
		use: Charge		
		based on hours		
		of broadcasting		
Qik	Qik Video user:	Qik Video user:	None	Likes, views
	Free of charge	Free of charge		
	Qik Premium:	Qik Premium:		
	Subject to a	Subject to a		
	charge	charge		

#### 4.1.1 Services for creating photos, videos and stories

*Scoopshot* was used in this study for receiving mobile assignments and submitting content. It is introduced in detail in Chapter 4.2.

*iStockphoto* is an online market place for registered users' material, such as photographs, videos, music and vector illustrations. The content is uploaded and purchased via a browser. Images can be searched and purchased also straight to Microsoft Word and PowerPoint or WordPress blog posts. There is a free mobile application available for iPhone which can be used for searching material.

There are six membership levels that affect the royalty rate and weekly file uploas. Contributors are compensated 15% for each file download and after becoming an exclusive contributor the royalty rate can be up to 45%. After a certain amount of downloads user moves to the next level which increases the number of files one can upload to iStock each week. Users may also get icons as prizes of awards or for achievements such as "Image of the week".

*Ushahidi*, "testimony", is an open source platform that allows anyone to share stories, photos or videos on a map. It was first built web-based for mapping reports of Kenyan post-election violence in 2008. Since then it has been used for different types of purposes, for example, election monitoring, crisis and emergency response and daily life like where to find the best burger. The Ushahidi platform can be installed locally or it can be setup in the cloud. The cloud version of Ushahidi is called Crowdmap. Both setups are free of charge as is the mobile client usage. Users can upload content using a free mobile application, online or via SMS and MMS.

*Meporter* is a location-based news application enabling registered users to write, photograph and video their local news. There is a free mobile application available supporting iOS and Android. Meporter can be used also via browser. Users can earn reward points of, for example, posting their first story or posting to specific categories. With the points they can buy items in Meporter store. Currently most of the content is from the USA, but also some Finnish content can be found. There are 73 different "Press Passes" that users can earn by, among others, sharing stories or inviting friends. With Press Passes a user can buy T-shirts, stickers, buttons and other products from Meporter's web store.

### 4.1.2 Streaming media

Streaming media means content that is sent over the Internet and can be presented immediately instead of saving it first. The content can be video or audio. Unless the content is live stream receivers can play it like downloaded media, for example, rewind or pause the stream.

Swedish-based *Bambuser* allows registered users broadcast live video to the internet. The broadcasting can be done using a mobile phone or a webcam. Bambuser has over a million users all over the world and it supports all well-known mobile phones and platforms. Using Bambuser is free of charge for consumers and non-profit organizations. For commercial usage Bambuser has a monthly cost based on additional features. According to Vinblad (2011), YLE Tampere used Bambuser for a year, but did not find its quality standard suitable for television program work and decided not to continue using the application. In spring 2012 news-gathering network Associated Press (AP) gave Bambuser users the chance to share their video content directly with the AP.

**Qik** (pronounced "Quick") enables users to capture videos with their mobile phones and broadcast them live. Videos are instantly uploaded to the web and they can be watched live or anytime later. Videos can be shared via Facebook, Twitter and Youtube or by sending a link to the video via email or SMS. Videos can be made public or private. A free of charge user account can store up to 24 videos. If more is needed, users can upgrade their accounts to Qik Premium which is subject to a charge. Besides unlimited storage, Qik Premium offers several additional features, like video mail. Qik is owned by Skype and it has millions of users all over the world. A mobile application is available for more than 160 mobile phone models.

### 4.1.3 Social media

Probably the best known application that is also used for crowd sourced news reporting is *Facebook*. It has approximately one billion registered users all over the world. Facebook is better known as a social networking service than a news source. Users can read and post short stories and multimedia content to one's own profile page or to public pages. Users may also follow up other users, groups or pages. It can be used via Facebook's online portal or a mobile application. Both of them are free of charge. Facebook is used for news reporting by many newspapers and their breaking news spread easily among users. Finding relevant sources from there is more challenging, because many pages are secured from non-friends using privacy settings and Facebook's search engine does not work very efficiently.

*Twitter* is an online social networking and micro blogging service that has over 500 million registered users all over the world. Twitter users can post and read text-based messages, "tweets", that are up to 140 characters long. The messages can be posted using SMS, online interface or any of the mobile applications available. Using Twitter is free of charge.

Twitter is used both for news reporting and UGC gathering. Twitter was used widely in news reporting during Arab Spring and in pursuance of several hurricanes. In 2012 The Tuscaloosa News won the Pulitzer Prize in the breaking news coverage category. They had used Twitter in reporting the damage of a tornado after the storm had knocked out power from the editorial office (Columbia University 2012).

## 4.2 Scoopshot

Scoopshot (scoopshot.com) is a Finnish mobile crowdsourcing application that enables registered users, scoopshooters, to submit photographs and videos from smartphones to be sold for media companies. Users may also carry out assignments created by media companies and get rewarded for them. The mobile application is free of charge.

After making an agreement with Scoopshot, media companies are allowed to post location-based assignments to registered users anywhere in the world. The recipient group of an assignment can be a self-formed community of invited scoopshooters or all scoopshooters on the targeted location. Through Scoopshot Store journalists can also purchase material uploaded to the service and hire professional and amateur freelancers directly.

### 4.2.1 Users

The number of registered users seems to grow with up to 555 users per day (see Figure 3). In January 2012 there were 35 000 scoopshooters in 135 countries, in April over 70 000 and in November there were already more than 160 000 scoopshooters in 165 countries. The number of scoopshooters is highest in countries where Scoopshot has launched by making an agreement with the local media. These countries are for example Sweden, the Netherlands, Denmark, Finland and Chile. In Finland there were over 11 000 scoopshooters in November 2012.

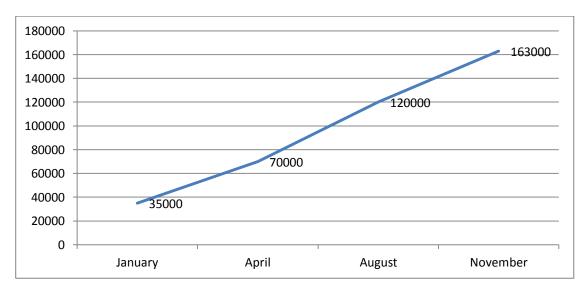


Figure 3. Number of registered Scoopshot users, scoopshooters, in 2012 (Scoopshot Store).

Scoopshot recruits two types of photographers: amateurs and freelance photographers. Amateur photographer downloads the application in one's mobile device, registers using the application and starts shooting material.

Freelancer photographers register online. As a freelance photographer you are expected to create a compelling portfolio of your work, describe your experience, photography equipment, language skills and provide your location. After registration media will rate the freelancer's work by its quality. The freelancer may then use the ratings and assignments received from media organizations to promote oneself in the portal, Scoopshot Pro.

### 4.2.2 Material

In November 2012 there were over 360 000 photos and videos uploaded in Scoopshot. Photos and videos can be uploaded only by registered users and they are available to be seen only by the registered buyer candidates. Photos and videos are taken using a mobile device with Scoopshot application. Device's own camera features, such as zoom, can be used in shooting. Material can also be imported to the application from the device's folder. The application is available for iOS and android devices in several languages.

The topic of a photo or video can be something that the scoopshooter thinks would interest media or described in an assignment created by an organization. In case of a spontaneous topic, the scoopshooter sets a price for the material. The price can be set gradually between 9 and 999 euros. The material will be available for sale for 48 hours and after that it will be removed from the site. In assignments the organization creating the assignment sets a reward that it is willing to pay for the material.

### 4.2.3 Assignments

Scoopshot has made agreements with several media organizations on using Scoopshot Store. The organization can buy news material available or create featured tasks, assignments, to get specific material needed. The recipient group of the assignment can be self-formed community of invited scoopshooters or all scoopshooters on the targeted location. All possible assignment properties are listed in Table 6.

Property	Description		
Publish as	The name of the assignment's initiator. Free text.		
Logo	A logo of the publication. Logos can be uploaded and		
	selected from a pull-down menu.		
Manager	Email address of the Scoopshot account.		
Task title	The title of the assignment. Up to 50 characters.		
Task description	The description of the assignment. Instructions for taking		
	the photo or video. Line brakes allowed. Up to 500		
	characters.		

#### Table 6. Properties of assignments.

Description of the taken content	Additional information on the content e.g. "What are the	
Description of the taken content	0	
	names of the people in the photo?" Up to 250 characters.	
Schedule	Instant task or Set specific dates. Instant task starts	
	immediately and validity can be selected from 2 h, 12 h,	
	24 h, 2 days and 1 week. Specific date and time can be	
	set for starting and closing of the assignment.	
Reward for purchased task items	The reward paid to the scoopshooter for purchased photo	
	or video. The currency can be selected from a pull-down	
	menu.	
Recipient group	All scoopshooters or Only community members. All	
	scoopshooters selection sends the task to all available	
	scoopshooters in the area specified in recipient location	
	field. Only community members selection sends the task	
	to initiator's own community members only.	
Recipient location	Set on map or Select a country. Set on map selection lets	
	the initiator find location by writing it down or by moving	
	and zooming in a map. The range can be adjusted with a	
	scroll bar. Country selection allows the initiator to select	
	any country. The number of scoopshooters in the	
	selected country is shown. If the recipient group is set to	
	Only community members, recipient location is not	
	selectable.	
Recipient location	the initiator find location by writing it down or by moving and zooming in a map. The range can be adjusted with a scroll bar. Country selection allows the initiator to select any country. The number of scoopshooters in the selected country is shown. If the recipient group is set to <i>Only community members</i> , recipient location is not	

Available assignments can be announced on Scoopshot's homepage, on the company's own web site or only locally in Scoopshot application for a limited time period. In March 2012 there were ongoing assignments all over the world from at least 11 organizations (see Table 7).

Country	Organization	Assignment theme	Published
	Fonecta	Front photo of a listed company	http://www.fonecta.com/fi_F I/scoopshot http://www.scoopshot.com
		Evaluate a listed company	http://www.fonecta.com/fi_F I/arvioyritys/ http://www.scoopshot.com
		Evaluate a listed restaurant	Scoopshot application
Finland	Tamperelainen Länsiväylä Lappeenrannan Uutiset Seinäjoen Sanomat Imatralainen Turkulainen Helsingin Uutiset Vantaan Sanomat	News photos	http://www.tamperelainen.fi/ tamperelainen/lukijan-kuva http://www.lansivayla.fi/lans ivayla/laheta-uutiskuva 
	MTV3	Power outage in Helsinki	Assignment closed
Sweden	Metro	Spring	Assignment closed

Table 7. Examples of published assignments in March 2012.

		Sports vacation	Assignment closed	
Denmark	24timer	Inside a supermarket	Assignment closed	
The Nethe	er- Metro	On a train	Assignment closed	
lands	Metro	Valentine's day	Assignment closed	
		Latest mobile gadg-		
Spain	Mobile World Congress	ets, the best stands,	Assignment closed	
		atmosphere		
Syria	Scoopshot	Photos of Syria	Assignment closed	
		Festival of Vina del	http://www.publimetro.cl/not	
	Publimetro	Mar	a/teknik/scoopshot-ahora-	
Chile		Conflict of Aysen	puedes-vender-tus-fotos-a-	
		News photos	publimetro/xIQlbv!CDhJF81	
			jw6sUI/	
USA	SXSW 2012	The festival buzz, the	https://store.scoopshot.com	
UUA	0//01/ 2012	live shows etc.	/task/1000311	

### 4.2.4 Payment and rights

The price of the material is set either by the scoopshooter in case of a spontaneous news photo or the organization creating an assignment. The rights of the material sold in Scoopshot are transferred as illustrated in Figure 4.

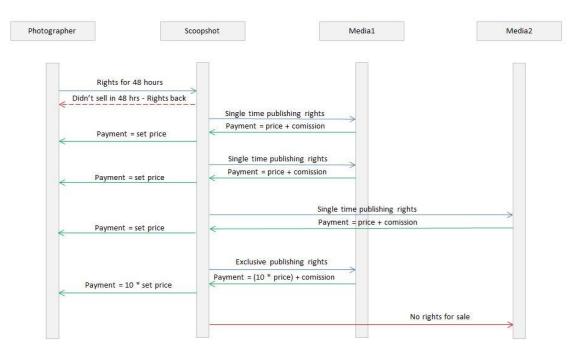


Figure 4. Payment and rights of Scoopshot material (adapted from Scoopshot.com, March 2012).

When submitting material to Scoopshot, the photographer gives Scoopshot the rights for 48 hours. In case the material is not sold during that period of time, the rights are reverted to the photographer. Scoopshot keeps the rights when selling media companies single time publishing rights. The buyer pays the price set by the photographer added with a

commission of Scoopshot, which is percentage of the price. Single time publishing rights can be sold to several companies unless someone buys exclusive publishing rights for the material. In that case the cost is ten times the price set by the photographer added with a commission of Scoopshot.

As soon as the money transfer between the buyer and Scoopshot is done, the scoopshooter gets a notification that one's Scoopshot account is credited. The reward can be transferred to the scoopshooter's bank account or PayPal account immediately or the scoopshooter can keep it in Scoopshot account for later transfers.

# 5 METHODS

The user study with readers of Omakaupunki.fi, Vartti and Metro was conducted in spring 2012 together with Sanoma Kaupunkilehdet. The goal of the research was to study participation preferences of the participants and accumulate implications for future development of news content co-creation process. The main research questions were the following:

RQ1: What factors affect participation in crowdsourcing activities? RQ2: What implications are found for future design concerning the usage of mobile assignments in reader reporter activities?

For Sanoma Kaupunkilehdet the goal of the trial with Scoopshot was to gain experience of assignment-based news content creation with reader reporters using a mobile client for receiving assignments and submitting content.

## 5.1 Setup of the study

A five-week trial with mobile assignments was followed by an online questionnaire open for all 104 participants and interviews of five participants. The trial started in March 2012 and data collection ended in the beginning of June 2012. The editorial staff of Omakaupunki.fi was responsible for recruitment of participants, creating and sending the assignments, selecting of photos to be purchased and rewarding. The researchers were responsible for the questionnaire, interviews, data collection, analysis and reporting.

An online questionnaire was selected as a method mainly because the contact details of the participants were not known. A request of participant's email address for sending the link to the questionnaire was conveniently sent via Scoopshot as an assignment. In addition, questionnaires are suitable for surveying large population. The questionnaire included also sentence completion questions. Semi-structured interview as a method was selected in order to get more detailed information on the participants' opinions of the trial and participation preferences.

## 5.2 Recruitment of participants

The recruiting of participants was carried out by Sanoma Kaupunkilehdet. 104 readers of Omakaupunki.fi were recruited to the Scoopshot trial via a website banner. The banner was visible to every third visitor of www.omakaupunki.fi for two and a half days.

The banner is presented between other articles in Figure 5. The text in the banner was as follows:

"Would you like to become a reader reporter? Join the trial! In order to, participate you need an iPhone or an Android phone. The editorial staff will send weekly photo assignments to the participants. Responding to the assignments is done using Scoopshot and it is completely optional. We publish photos in Metro, Vartti and Omakaupunki.fi. A reward is paid for photos published in print! The trial lasts for approximately two months. Be quick, it is limited to the first hundred!"

<ul> <li>- Kyllä nyt nopeudet täytyy laskea alas. Satasta ei voi tässä kollasä ajaa edes moottoritiellä. Ja jos ei ole ihan pakko lähteä, kannattaa auto jättää kotiin tai työpaikalle.</li> </ul>	Plarmas talous kurtin Kauppatorilla Krounurkete 36.5.2012		
Palomestarin arvion mukaan tiistainen ajokeli oli samaa luokkaa kuin perjantaina 3. helmikuuta pääkaupunkiaeudulla. Silloin kymmenien autojen kolarisumia aattui Lahdenväylällä ja Kehä III:lla.	Prunkatiola käpellään tasa tuuskyk 31231013		
Evelina Ruokolainen, Vartti	Tuteudelea: Tuteudeleana balanar bysta in 1997 Malice Kaupunklioppaat Nöyä tukki -		
MUUNLLA OMASSA KAUPUNUPEA Koletsuma hidast lähennestä Kähä III.la uursen	Kaupurkoppelitis kyste pamaat innet kaupungin pakveuhin. Lusiatelemaan - katso lista kentistät		
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Figure 5. Banner for the Scoopshot experiment.

As illustrated in Figure 6 total of 580 people clicked on the Join button. 199 of them wanted to be contacted and entered their email addresses. They were sent an invitation to join Omakaupunki's Scoopshot community. 123 persons confirmed the invitation and finally 104 persons of them registered as a user in Scoopshot and in Omakaupunki's Scoopshot community.

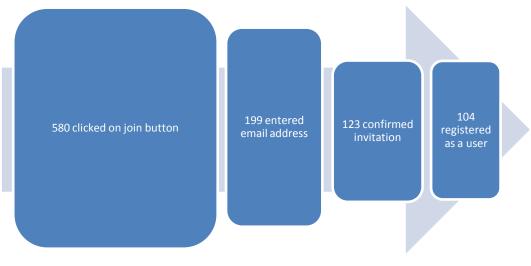


Figure 6. Process of joining the Scoopshot trial.

# 5.3 Apparatus

The participants were using their own smartphones (iPhone or Android) with Scoopshot mobile application (see Figure 7) installed. Based on the questionnaire (17 responses) phone models of the respondents were almost equally distributed between iPhone (9/17) and Android phone (8/17).

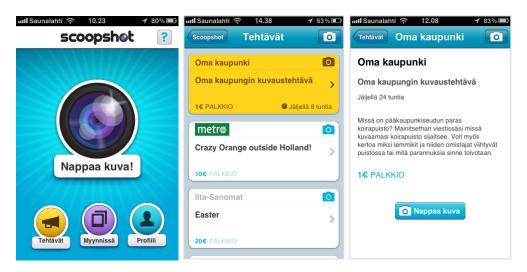


Figure 7. Finnish version of Scoopshot mobile application for iPhone (April 2012). From the left: Main view, Assignments view and an assignment in detail.

With Scoopshot mobile application user is able to shoot spontaneous photos or videos, carry out assignments, follow sales information of own photos and modify profile. Depending on preferences, user is able to get a notification of new assignments available and of photos being sold.

The editorial staff of Omakaupunki.fi used Scoopshot's online portal, Scoopshot Store (see Figure 8), for creating assignments and purchasing photos.

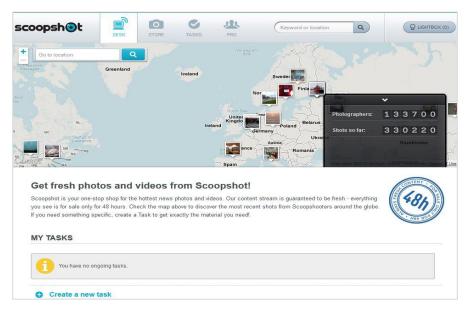


Figure 8. Scoopshot Store portal, Main view.

Through the portal media companies can create assignments and send them to their own communities or to scoopshooters on a selected area. They are able to view and buy spontaneous photos or videos of scoopshooters all over the world. Only the photos and videos sent as a response to another initator's assignment are not visible to others.

# 5.4 Data collection methods

## 5.4.1 Field study

The participants were sent mobile reporting assignments weekly, in total 5 assignments (see Table 8) during March and April 2012. The first assignment was sent on the 27th of March. Moreover, the participants were sent a welcome message, information on rewarding and a request to participate in a survey. These messages were also sent as Scoopshot assignments.

;	#	Assignment topic	Validity	Scoopshot reward	Sanoma reward
	1	Cleaning the environment	1 week	1€	50 €
1	2	Tallinn shipping	12 hours	1€	50 €
;	3	Noise barriers	2 days	1€	-
4	4	The best dog park	2 days	1€	Movie tickets
ļ	5	Street conditions	1 day	50 €	-

### Table 8. Assignments sent to participants.

For example, the description of assignment number four was the following:

"Where is the best dog park of the metropolitan area? Write down in your message where the dog park is located. You can also tell why pets and their owners enjoy the park or what improvements are wished for."

All the assignment descriptions can be found in Appendix A.

Scoopshot reward was paid for all bought photos. In addition, the participants were rewarded for photos published in print media (see "Sanoma reward" in Table 8).

The assignments were created and sent by the editorial staff of Omakaupunki.fi using Scoopshot Store portal. The most important properties each assignment had were a description of the assignment, validity (until when the assignment is open for carrying out) and reward information. The recipient group in all the assignments was Omakaupunki's Scoopshot community.

### 5.4.2 Questionnaire

In the end of the trial the participants were asked to send their email addresses for receiving a link to a web questionnaire concerning the study. The link to the questionnaire with 34 questions (see Appendix B) was sent to twenty participants. 16 of them had responded to the Scoopshot assignment and four of them contacted the project manager via email. The questionnaire was open online for two and a half weeks between May 22th and June 8th. There were 17 respondents. All the responses were given during the first week the questionnaire was open.

Themes of the questionnaire were based on the results of earlier studies by Väätäjä (2011). The main themes were

- the trial,
- Scoopshot,
- assignments,
- readers' material,
- context of use,
- participation,
- background information, and
- other.

The questions are categorized in more detail in Appendix C.

At the beginning the respondents were asked to describe how they found the trial. The next three questions were about Scoopshot as a tool and the respondent's own Scoopshot usage prior to the trial. After the questions about Scoopshot, the respondents were asked about their participation in the trial. Next there were three questions about the assignments sent during the trial including the frequency, validity and topics of the assignments.

After the questions about assignments the respondents were asked to describe a good user-generated photo, video and story. The results of these three questions are reported separately (Jaakola 2012).

Next question was a multiple-choice question about types of assignments the respondent would be interested in. After that there were five questions about context of use, for example, where would the respondent be willing to carry out assignments. Next two questions were about earlier participation followed with nine background questions including age, gender, education, phone usage and photographing habits. The last three questions were contact details for the reward and possible interview requests.

Prior to the questions development, to find the most representational quality attributes describing the assignments (see Appendix B, question number ten), nine participants (five male and four female aged between 28 and 39 years) were asked to evaluate assignments in a scenario of being a reader reporter (see Appendix D). The participants were given descriptions of five assignments sent during Scoopshot trial and they were asked to complete sentences to describe what each of them was like. The scenario was as follows:

"Imagine yourself in receiving reader reporter assignments in your mobile phone. Describe with adjectives what the assignment is like. Complete the sentences".

After each assignment description there was a beginning of a sentence "I find the assignment to be" that the respondent was asked to complete.

The outcome of the quality attribute questionnaire was 91 different adjectives (see Appendix E) from which seven most used were selected as quality attributes for the reader reporter online questionnaire. Five of them were selected based on the number of occurrences (see Table 9) and the other two by grouping adjectives of similar meaning.

Category	Total	Attribute	Count	
Helppo (easy)	6	Helppo (easy)	6	
Hyödyllinen (useful)	6	Hyödyllinen (useful)	6	
Tylsä (boring)	8	Tylsä (boring)	8	
Tärkeä (important)	6	Tärkeä (important)	6	
Yhteisöllinen (communal)	4	Yhteisöllinen (communal)	4	
Ei motivoiva (not motivating)	6	Ei kiinnostava (not interesting)	2	
		Ei mielenkiintoinen (not interesting)	2	
		Ei mieluisa (not pleasing)	1	
		Ei motivoiva (not motivating)	1	
Vaikea (difficult)	8	Vaikea (difficult)	4	
		Vaikea tietää mitä halutaan (difficult to	1	
		know what is wanted)		
		Vaikea toteuttaa (difficult to carry out)	1	
		Vaivalloinen (troublesome)	2	

Table 9. Quality attributes selected for the reader reporter online questionnaire.

#### 5.4.3 Interviews

In the questionnaire respondents were asked if they were interested to participate in a one hour interview. Five of the questionnaire respondents were interviewed in a café in Helsinki in June 2012. The interviewees were compensated with two movie tickets. The interviews were recorded and transcribed.

The interviews were semi-structured (see Appendix F). The themes of the interviews were

- photographing background,
- former participation,
- quality of user-generated content,
- about the trial,
- factors affecting carrying out assignments,
- assignments during the trial,
- assignments in general,
- development ideas,
- scenarios, and
- other thoughts.

The interviewees were asked about their photographing background, their former participation in reader reporter activities followed the quality of user-generated content including photos, videos and stories. They were asked about the UGC they watch and what makes UGC worth publishing. The results of the quality questions are reported separately (Jaakola 2012).

Next the interviewees were asked about the trial and their experiences with Scoopshot and its features. After that they were asked about the factors affecting carrying out assignments and how do they affect.

Following the discussion about factors, the interviewees were given the descriptions of three assignments sent during the trial. The descriptions of the assignments were given one at a time to be read and after reading the interviewees were asked if they had carried out the assignment and if they had, to describe the process and what made him carry out the assignment. They were asked about other possible thoughts, feelings and ideas raised by the assignment. They were also asked their opinions on the validity and the reward of the assignment. After going through the assignments, the interviewees were asked about their preferences for carrying out assignments, the types of assignments and the context of use.

Next the interviewees were asked about their development ideas of participating reader reporter activities. They were asked to read through four scenarios (Appendix G) of augmented reality applications for participation. After reading each scenario they were asked what kind of thoughts, feelings or ideas came into their minds with the scenario, could they see themselves using the application, in what kind on situations could they see themselves acting like this and how this application could be used in news creation.

In the end of the interviews there was an informal conversation concerning the subjects discussed during the interview.

## 5.5 Analysis

The questionnaire responses were analysed using frequencies and cross tabulating. The cross-tabulating was done with the results of young respondents (aged between 15 and 25) against the older respondents and with the results of respondents who did not carry out assignments against the ones who did.

The interview recordings were transcribed and the data was analysed using data driven descriptive coding (Saldaña 2009). First the transcribed interviews were tabulated. Each question and answer was on a separate row. Each row was coded with unique cipher. The cipher format was SCxx-yyy. SC is for Scoopshot, xx the number of the interviewee and yyy the row number, for example, SC01-123.

After coding, the interviews were analysed and coded into eight groups: background information, participation, motivation, material, the trial, scenarios, Scoopshot and other. Then each of the coded data columns was copied to a separate tab, which was named after the code. Next the data was coded into more and more detailed groups. All groups can be seen in Appendix H. Each of the analysed and coded comments can be traced back to the original interview using the cipher.

# 6 RESULTS

This chapter presents the results of the study. First, the participation activity during the trial is highlighted. Next, in chapter 6.2 the results of the online questionnaire are reported. Chapter 6.3 presents the results of the interviews.

## 6.1 Responding to the assignments

The degree of activity decreased gradually. The first message sent, Welcome message, was viewed by 88 % (91/104) of the participants and the last assignment was viewed by 54 % (56/104) of the participants, being the least popular based on views. All general messages that were sent are listed in Table 10 and assignments sent during the trial are listed in Table 11. Scoopshot reward was paid for all photos bought and Sanoma reward for photos published in print media.

Торіс	Validity	Views
Welcome message	1 week	91
About rewarding	1 week	87
Questionnaire invitation	1 week	59

Assignment topic	Validity	Scoopshot reward	Views	Submit- ters	Photos	Purchased	Printed	Sanoma reward
Cleaning the environment	1week	1€	87	9	15	5	4	50 €
Tallinn shipping	12 hours	1€	68	2	27	2	1	50€
Noise barriers	2 days	1€	63	2	2	0	0	-
The best dog park	2 days	1€	64	2	2	2	1	2 movie tickets
Street conditions	1 day	50 €	56	3	7	1	1	-

Table 11. Assignments sent to the participants.

The number of participants submitting photos to each assignment decreased from 9 to 2-3 (see Figure 9). The most popular assignment based on the number of submitters was "Cleaning the environment" with 9 submitters. The last message that was sent, Questionnaire invitation, had only 59 views but gained 16 submitters. The total number of submitters was 23, but no more than fourteen of them sent photos to assignments. The other nine submitted only to the questionnaire invitation. There was only one participant who submitted photos to three assignments and three participants who submitted to two. The rest of the submitters (10/14) sent photos to one assignment.

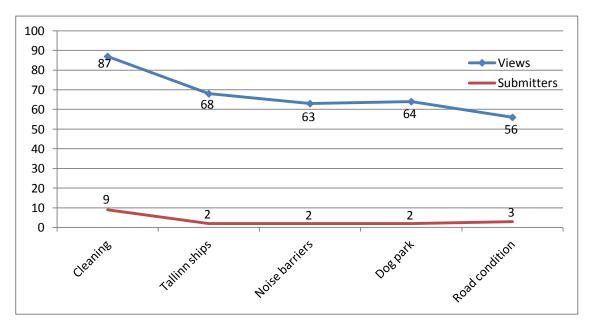


Figure 9. Number of views and submitters of photos.

As illustrated in Figure 10, the number of photos sent to assignments varied. The most popular based on the number of photos was Tallinn shipping. There were two participants submitting photos and one of them submitted 26 photos. The second most popular based on the number of photos was Cleaning the environment with 15 photos.

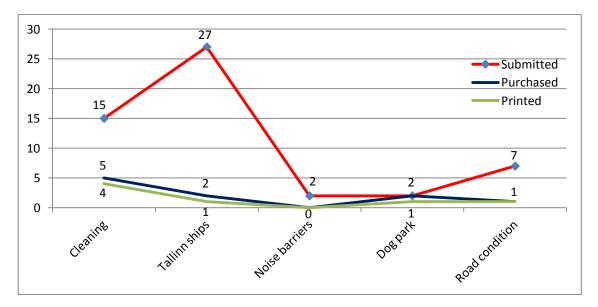


Figure 10. Number of photos sent to assignments and photos purchased.

Not all of the purchased photos were used in print media, but all, except one dog park photo, were published online. *Figure* 11 is an example of a photo used in printed media. The photo was submitted to Cleaning the environment assignment and published in Vartti. The photographer was rewarded with fifty euros for publishing in print media (see "Sanoma reward" in Table 11).



GRAFFITIAIDAN YMPÄRISTÖÖN on päässyt kertymään paljon jätettä Kalasatamassa.

Figure 11. Photo submitted to "Cleaning the environment" assignment and published in Vartti. Photographer J-P Luostarinen.

## 6.2 Questionnaire results

## 6.2.1 Respondents

Based on the responses to the questionnaire (17 responses, 16 men, 1 woman), the following demographics of the respondents can be outlined: Age: min=15, max=53, M=28, Md=26, SD=10.4. Age distribution can be seen in Figure 12.

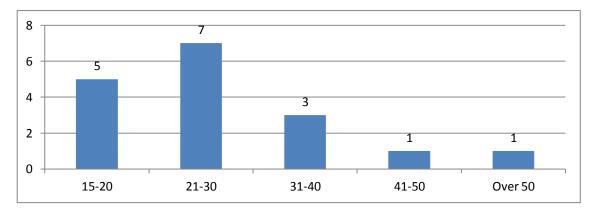


Figure 12. Age distribution based on the questionnaire (N=17).

Eight of the respondents were aged between 15 and 25 (8/17). They were considered as young respondents in this study.

Seven respondents reported vocational degree as their highest level of education (7/17, 41 %, N=17), two (2/17) had higher vocational degree, three (3/17) university degree and five (5/17) were secondary school graduates or lower. Six of the respondents (6/16, 38 %, N=16) were students. Otherwise the occupations varied.

Based on the questionnaire, all of the respondents were active in photographing. 59 % (10/17) of them took photos daily and 41 % (7/17) weekly. Noteworthy is that 71 % (5/7) of those who did not submit any photos to the assignments took photos daily. The degree of activity in video recording was lower. Only one of the respondents recorded video daily, 47 % (8/17) weekly and 41 % (7/17) monthly. One respondent recorded video less frequently.

#### 6.2.2 Former participation

Reader activity prior to the trial was low. The respondents were asked whether they had submitted reader photos prior to the trial or not. If they had, they were asked how often approximately they had sent reader photos to Omakaupunki.fi / Vartti / Metro, other news media and Scoopshot during the last half a year.

70 % (12/17) of the respondents had sent photos to news media prior to the trial, but very seldom. As seen in Figure 13, only one of the respondents had sent photos weekly to Vartti, Metro or Omakaupunki.fi. The same respondent sent photos weekly also to Scoopshot and other media. One respondent had sent photos daily to Scoopshot, but less than monthly to the others. Scoopshot seemed to be the most popular media to send photos among the respondents.

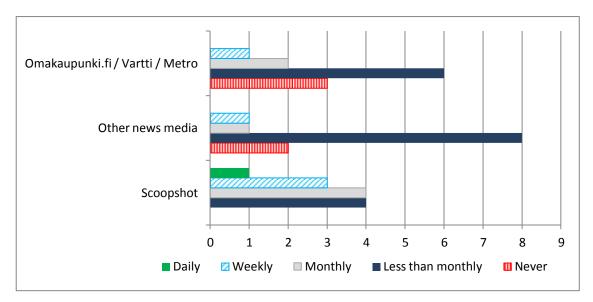


Figure 13. Reader activity in participation prior to the trial.

## 6.2.3 The trial

The respondents were asked to describe the trial with 1-3 different sentences. The question was as follows: "How did you find the trial? Please, complete the sentence with one to three ways. In my opinion the trial was". The answers were first categorized into positive and negative expressions. 82 % (31/38) of the expressions were positive and only five (5/38) of them were negative.

Next the expressions were categorized in eight categories. The most common categories were interesting (9/38), innovative (8/38) and nice (6/38) as shown in Figure 14.

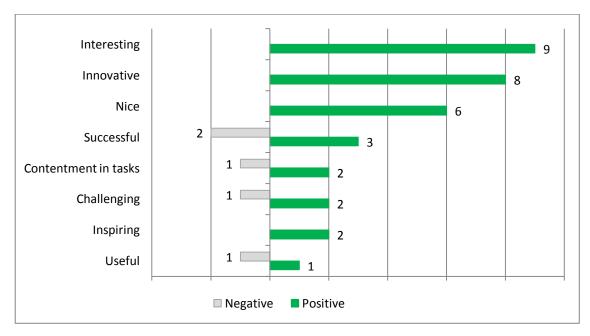


Figure 14. Categorized descriptions for the trial (N=17).

All categorized expressions are found in Appendix I.

#### 6.2.4 Carrying out assignments

The participants were able to submit photos and respond the questionnaire anonymously. That is why the respondents were asked whether they had submitted photos to the assignments or not. Ten respondents had submitted photos and seven had not. Six of those respondents who did not submit photos (6/7) were aged between 15 and 25 years old . Only two of the submitters were of that age group.

Depending on the response to the question of submitting photos, the respondents were asked for their motivations for responding or not responding to the assignments. The multiple choice questions (see Appendix B, questions 6 and 7) were created based on the earlier study about participation preferences (Väätäjä 2011).

The most popular motivation for carrying out assignments was that the assignments were interesting. Respondents also thought that searching for a suitable subject was nice and they wanted to earn some money. All motivations and number of respondents are shown in Figure 15. Other motivations (see Figure 15) were influencing and gaining new technical experiences.

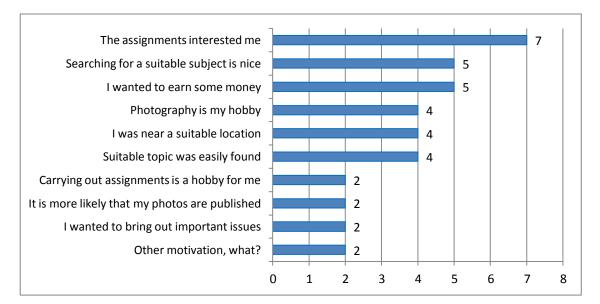


Figure 15. Motivations for carrying out assignments (N=10).

Reasons for not carrying out assignments were that a suitable object was not found or the respondent had not been near the location. Other reason in Figure 16 was that the respondent did not live on the Helsinki area where the assignments were supposed to be carried out.

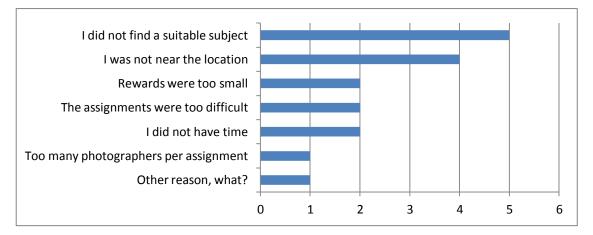


Figure 16. Reasons for not carrying out assignments (N=7).

Other options available for selecting were "The assignments did not interest me", "I did not follow the tasks", and "I believe, that I will not get a reward". Notable is that none of the respondents selected these options.

## 6.2.5 Assignments

Assignments were sent once a week. When asked "Do you think assignments were sent often enough?" The answer alternatives were Yes, No and I cannot say. 76 % (13/17) of the respondents thought that was not often enough. Two of those who did not submit any content reported that there were enough of assignments (2/7).

The respondents were asked "What do you think about the period of validity of the sent Scoopshot assignments?". The most suitable validity for an assignment was two days according to 82 % (14/17) of the respondents. As illustrated in Figure 17, also one day and one week were found suitable by 41 % (7/17) of the respondents. On the other hand one day was considered quite short by 59 % (10/17) and one week quite long or too long by 47 % (8/17) of the respondents. None of the respondents considered half a day suitable. It was considered too short by 65 % (11/17).

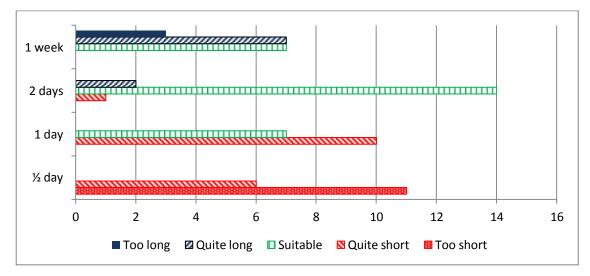


Figure 17. Validity of an assignment (N=17).

The next multiple choice question was about the topics of the assignments sent. The question was asked in a form of sentence completion as follows: "The topics of the assignments were voluntary cleaning, Tallinn shipping, noise barriers, the best dog park and street conditions. What do you think about the topics? In my opinion the topics were..." The choices for the question were selected via a questionnaire as described in chapter 3.1.5. All choices can be seen in Figure 18.

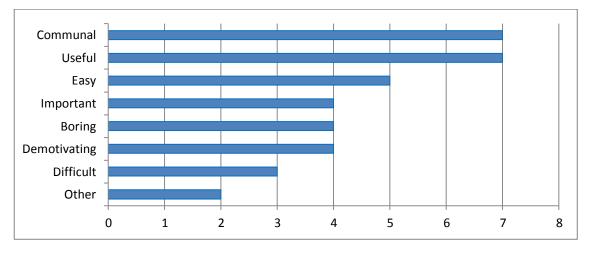


Figure 18. Perceptions of the assignments' topics (N=17).

The most often reported topics were communal and useful (both 7/17, 41 %), easy and important, but also boring and demotivating (both 4/17, 24 %). Two respondents added their own descriptions and said the topics to be a handy way of collecting photos for the newspaper and also that there is a possibility to influence. The perceptions divided according to age groups are shown in Figure 19 and the perceptions divided according to responding to the assignments are shown in Figure 20.

The young respondents, aged between 15 and 25, described the topics less positively. 75 % (6/8) of them thought the topics were boring or demotivating. One young respondent thought the topics were difficult, whereas three of them (3/8) found them to be easy. Only one of the young respondents found the topics important and useful.

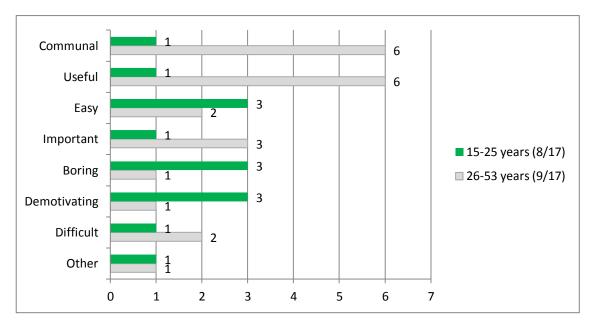


Figure 19. Perceptions of the assignments' topics divided according to age groups (N=17).

Three of those seven respondents who did not submit any content thought that the topics were easy. Only one of them thought they were boring and one that they were difficult. On the other hand also only one of them thought that the topics were useful.

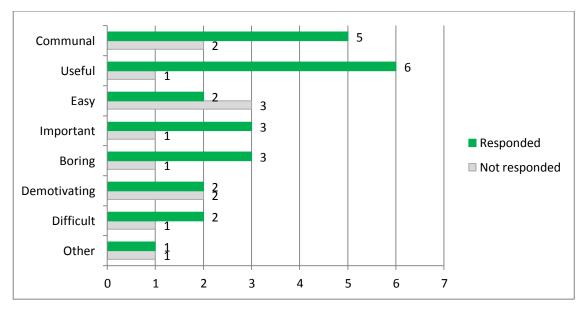


Figure 20. Perceptions of the assignments' topics divided according to responding to the assignments (*N*=17).

The respondents were asked what kind of assignments they are interested in carrying out, using a multiple choice question. All the respondents were interested in carrying out photo assignments and 65 % (11/17) of them also video assignments (see Figure 21).

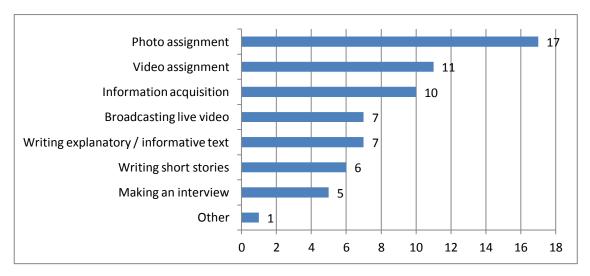


Figure 21. Interest in carrying out different types of assignments (N=17).

Information acquisition, such as finding out how much a kilo of new potatoes costs on a market place, was reported being interested in by 59 % (10/17) of the respondents. Notably students (4/6) were willing to carry out this kind of assignments and two of them were willing to carry out all kinds of assignments. One respondent would prefer assignments that would bring out disturbing issues, like duration of green in traffic lights.

## 6.2.6 Context of use

The questionnaire included five questions about the context of use. The respondents were asked with multiple choice questions where, when and in what situations they would prefer to carry out assignments. They were also asked the maximum distance willing to travel and the maximum time willing to spend for an assignment.

## Task context

Most of the questionnaire respondents (15/17) were willing to carry out assignments on free time and those who were not (2/17), were only ready to carry out them when there is nothing else to do (Figure 22). Other situations mentioned were during hobbies and while waiting for something.

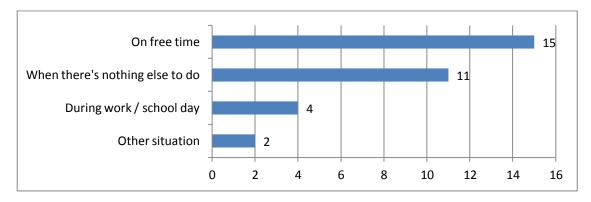


Figure 22. Situations for carrying out assignments (N=17).

Only one of the respondents willing to carry out assignments during the work or school day was aged between 15 and 25 years.

## Temporal context

As illustrated in Figure 23 the preferred times were weekends and evenings but 64.7 % (11/17) were ready to carry out assignments at any time. Notable is that all of those seven respondents who did not submit any photos during the trial were ready to carry out assignments any time (7/7), but only four of those who did submit photos (4/10). Also all except one of the young respondents (aged between 15 and 25) were ready to carry out assignments any time (7/8), but less than a half of the respondents over 25 (4/9). The respondents' over 25 most preferable time for carrying out assignments was at the weekends (6/9).

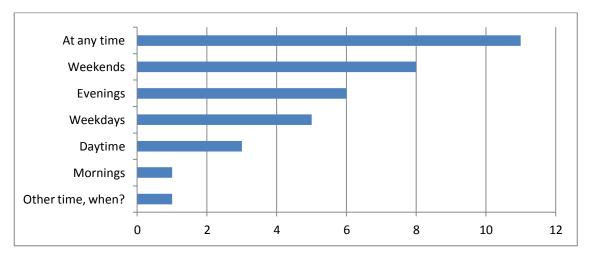


Figure 23. Time for carrying out assignments (N=17).

76 % (13/17) of the respondents were ready to spend more time than a half an hour including the time of travel, carrying out the assignment and submitting the material (Figure 24). Notable is that 57 % (4/7) of those who did not submit any photos during the trial were ready to spend more than an hour for an assignment and of those who did submit photos only 40 % (4/10).

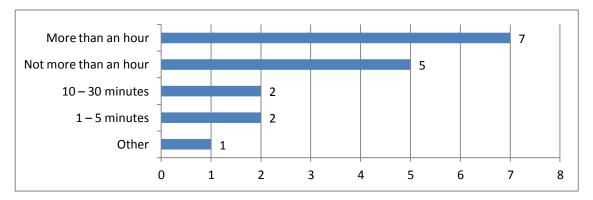


Figure 24. Maximum time willing to spend for an assignment including the time of travel (*N*=17).

89% (8/9) of the respondents aged over 25 years were willing to spend an hour or more for an assignment, whereas 63% (5/8) of the younger respondents were willing to do that.

## Physical context, task context

All respondents except one liked to carry out assignments anywhere if they are around. As shown in Figure 25, 71 % (12/17) of them wanted to carry them out close to workplace or studies and near home. The least popular place for carrying out assignments was in the city center. Only 35 % (6/17) of the respondents were ready for that. One respondent selected the choice "Other" and defined it while travelling.

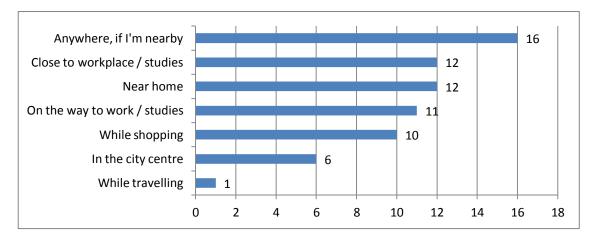


Figure 25. Activities and locations where willing to carry out assignments (N=17).

The respondents were ready to make the effort in carrying out assignments. Besides being ready to do the activity at any time, 82 % (14/17) of them were willing to travel at least five kilometers (Figure 26) for carrying out an assignment. Notably all respondents aged over 25 years were willing to travel five kilometers or more for an assignment (9/9).

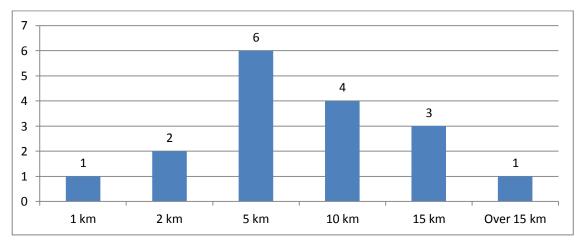


Figure 26. Maximum distance willing to travel for an assignment (N=17).

In spite of the willingness to put effort to carry out tasks seemed to be high, the actual activity was low in the trial.

## 6.2.7 Suitability of Scoopshot

The respondents were given statements on Scoopshot's suitability for reader reporter activities. The statements were "Scoopshot is suitable for receiving assignments" and "Scoopshot is suitable for submitting photos". The respondents were asked to rate the statements from 0 to 10, zero being not suitable and ten extremely suitable.

94 % (16/17) of the questionnaire respondents found Scoopshot suitable or even extremely suitable for receiving the assignments and sending photos (see Figure 27 and Figure 28).

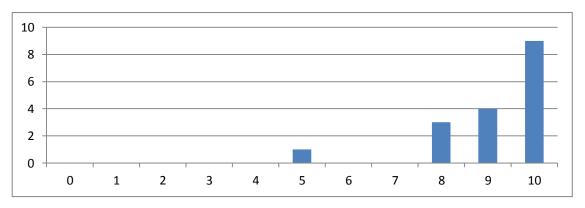


Figure 27. Scoopshot's suitability for receiving assignments (0=not suitable 10=extremely suitable).

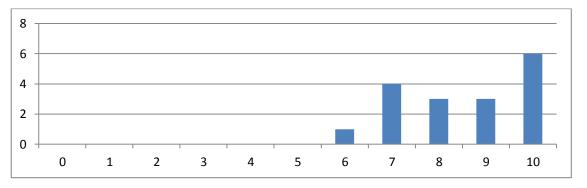


Figure 28. Scoopshot's suitability for submitting photos (0=not suitable 10=extremely suitable).

14 of 17 (82 %) respondents had used Scoopshot prior to the trial.

## 6.2.8 Ideas and feedback

The last question before contact details was to give ideas and feedback. The question was as follows: "Please, feel free to tell your ideas and give feedback about readers' participation, assignments, rewarding for participation or other things concerning the trial."

Eleven respondents answered the question (11/17) giving twenty separate inputs (see Appendix J). Four of the inputs were positive (4/19), ten were negative (10/19) and six of them were neutral ideas and wishes (6/19). Eight of the negative inputs were given by respondents who did not carry out assignments and were aged between 15 and 25 years (8/11).

Positive feedback was received about the validity of the assignments and Scoopshot as a tool. The trial was said to be sensible activity.

#### "This felt sensible activity. More of this!" Male, 28

Two of the negative inputs were related to rewards. One thought that the rewards were too small compared to the work. Another one thought that the reward was not worth travelling that far and spending more time than a few minutes.

Seven of the given inputs were topic related. Two of the respondents did not find the topics very motivating, but they did not suggest any topics themselves either. One respondent gave suggestions for topics, for example, annoying behavior, parking or smoking and unnecessary bus lines. Another respondent wished for a competition of recognizing places. There were wishes for broader topics and that some topics would be more difficult than the others. Also topics concerning the youth were wished for.

*"More assignments concerning the youth!! We are the future, hey? :P"* Female, 19

All the feedback given can be found in Appendix J.

## 6.3 Interview results

## 6.3.1 Interviewees

All questionnaire respondents who showed their interest in participating in an interview were interviewed. They were five. All the interviewees were male. Based on the questionnaire responses, following demographics can be outlined: Age: min=26, max=53, Md=34. None of the interviewees was from the young respondents group, aged between 15 and 25 years.

Based on their responses in the questionnaire, all of the interviewees had submitted photos to the assignments (5/5). Based on the interviews and their responses in the questionnaire, two of them could be considered as intentional and actively seeking photojournalists, whereas three of them more randomly acting photojournalists (Buehner, 2012).

### 6.3.2 Photographing background

The interviewees were asked about their background information on photographing and participation.

All interviewees (5/5) enjoyed photographing as a hobby. Three of them took photographs daily and two of them weekly. Their favourite topics varied from nature and family to buildings and social evils. One interviewee said that photographing has been his hobby for two years and the other four started over ten years ago. One of them started photographing about 40 years ago and had even been working in photo shops and studied to become photographic laboratory assistant. Nowadays he found video shooting even more appealing than photographing. The others shot videos more erratically. One of the interviewees shot videos only of his daughter because he felt video shooting unfamiliar to himself.

## 6.3.3 Participation

Photographing was a pleasing way to participate in reader reporter activities for all of the interviewees (5/5). Two of them sent also video material. The other three had not sent any videos.

Only one of the interviewees was interested in writing stories. He had started participation almost 40 years ago by photographing and writing stories to his local newspaper. He had used all available channels for sending material starting from personally delivering photos and stories to the editor. The others were novices compared to him. One of them had started sending photos five years ago and one of them a few years ago. Scoopshot had been the starter for two interviewees. The interviewees' background information is put together in Table 12.

Age	Photographing as a hobby	Participation duration	Ways to participate Photo / Video / Story		Preferred mode Assignments vs. spontaneous		Intentional vs. Randomly acting		Channels Web form / MMS / Scoopshot			
			Р	V	S	Α	S	1	R	W	М	S
26	Over 10 years	5 years	х	х		х	х		Х	х		х
28	2 years	A few years	х			х			Х		Х	х
34	Over 10 years	Since Scoopshot (one year)	х			х		x				x
38	Over 10 years	Since the trial	Х			х			х		х	х
53	40 years	Almost 40 years	х	х	х		х	х		х	х	х

Table	12: Interv	iewees'	background.
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All of the interviewees were interested in carrying out assignments. Only one of them preferred spontaneous photographing to assignment-based. He felt that by choosing the

topics himself, he has more possibilities to influence. Three interviewees said that they prefer assignments and one interviewee could not tell which is more preferred to him. One interviewee had never submitted spontaneous news photos, because he did not think his photos were newsworthy. After the interview he said he would start submitting spontaneous news photos too.

Other ways of participation were also discussed. One of the interviewees had participated in crowdsourced translation and one of them sends information on typos in teletext to different television channels. Thoughts for future forms of participation were sending story ideas, carrying out gallup polls, streaming live video and correcting typos and spelling mistakes.

#### 6.3.4 Motivation

The interviewees were asked about their motivations to joining the trial and participation in general. They were also asked when they feel successful in participation.

All of the interviewees are interested in photographing. They do it for fun and to improve their photographing skills. One of them said that nature and animals are close to his heart and he photographed nature just for himself. Another interviewee also enjoyed outdoor activities with his dog and always carried a camera in his backpack. One of them said he was not interested in photographing the nature but urban landscape and unpolished surfaces.

Carrying out assignments was said to be a change to spontaneous photographing and nice additional activity. Receiving assignments was said to be fun and playful. One of the interviewees felt himself important receiving assignments and being able to contribute something useful, as he said:

"It makes you feel kind of important; your contribution has been useful." Male, 34

One interviewee said that he sees an assignment as a challenge when trying to find a suitable target. Carrying out assignments was also said to be a possibility to learn and experiment something out of the ordinary.

The most common motivation to take part in the trial was interest in Scoopshot and carrying out assignments (4/5). One of the interviewees said that Scoopshot was close to his interests, for he is a technical person who often does beta-testing.

Three of the interviewees felt that they had succeeded if their photos were published (3/5). One interviewee felt he had succeeded, if he himself was satisfied with the photo, whether the photo got published or not. One of them expressed that he was so used to have his photos published that he did not get much fulfilment of it. The most important motivation to him was to influence and get something fixed with his photos and other material. He said:

"I don't know if it gives you pleasure that your photo is published in a newspaper, so used to it. But when I carried out the assignment of road conditions and it was published in a newspaper, I noticed that after a week that spot had been repaired. That had an influence somehow." Male, 53

Money and getting a reward was not the biggest motivation to participate and carry out assignments to any of the interviewees (0/5). One of them even wanted to upload photos to Scoopshot without any payment and another one had shared photos online under Creative Commons license, which means that the photos can be used free of charge, but the photographer's name and the source of the photo must be published.

Three interviewees expressed in the interviews that they considered the possibility to influence and cause overall benefit with their photos more important than the reward (3/5). One of them said about the Cleaning the environment assignment that he got more satisfaction from the fact that the mess was cleaned up than the reward of 50 euros.

"Let's say, I got 50 euros of it. It's not that. I got more satisfaction of the mess being cleaned up." Male, 53

However, getting some extra income was thought to be a nice bonus and two of the interviewees had selected as one of the motivations for answering the assignments "I wanted to earn some money" in the questionnaire.

## 6.3.5 Scoopshot

All of the interviewees were pleased with Scoopshot as a tool for participating (5/5). Four of them had used Scoopshot prior to the study and one of them heard of it for the first time when he enrolled on the trial. They thought that Scoopshot was convenient to use especially for assignment-based participation. Snapping and submitting of photos was said to be easy and effortless. Carrying out assignments in Scoopshot was said to be fun, playful and challenging. Moreover it was thought to be positive that one does not have to know any numbers where to submit photos and submitting is free of additional charge using data subscription or via wireless network. Scoopshot was wished to stay as one channel to participate.

Four interviewees liked company photographing and evaluation assignments initiated by Fonecta. One of them had carried out about 1000 of those in one month. One interviewee was not interested in them and hoped for better content in assignments. Fiat competition by Autokeskus, where the scoopshooters were expected submit photos of a certain Fiat model, was said to be a brilliant idea and a good advertisement.

Scoopshot was said to be going in good direction with more assignments and better instructions yet more assignments were wished for. It was thought to be not known widely enough to get one's news photos sold and that way not very motivating. Three interviewees had sold a news photo via Scoopshot and one of them more than one. One of them was willing to submit news photos with no reward, which is not currently possible.

Moreover, some ideas for developing the application arose in the interviews. One of the interviewees would like to see photos that other scoopshooters have submitted to assignments. One of them would like to see the assignments on a map view as in Scenario 1 used in the interview (see Appendix G). The same interviewee suggested that the assignments could be available to first five scoopshooters and in case they are not able to submit sufficient content, the assignment would be opened to other scoopshooters in the area as well. He also put forward that an editor should be able to allocate an assignment to a scoopshooter that is already known of one's good work. The interviewees thought that Scoopshot has a lot of potential for other use also than just media companies', for instance for location-based translation assignments or for "question of the day" type polling.

#### 6.3.6 Material and location information

The interviewees were asked about the material they submit and about using locationaware services. They were also asked about the quality of reader material, but those results are reported in a separate study (Jaakola 2012).

All of the interviewees submitted photos to the assignments during the trial. Only one of them had not yet submitted spontaneous news photos. One of them submitted a lot of spontaneous photos and chose the media based on the photo's topicality. Two interviewees submitted also videos and one of them wrote stories.

Two of the interviewees shared their photos with their friends in social media and one of them via email. One of the interviewees had shared his photos online under Creative Commons license and his photos had been used for web publications, magazines and record covers. One interviewee shared his videos in Youtube.

Four of the five interviewees thought positively about positioning and they used automatic geotagging with their photos (4/5), whereas one interviewee thought that with some photos giving the exact location would be even harmful (1/5), for example, when photographing protected animals. Instead of automatic positioning, he added only a rough location to protect his source. In some cases like traffic problems or an object to be fixed, he thought that giving the exact location is important.

#### 6.3.7 The trial

The trial was found nice and fun. It was described as "a competition", as "a game", as "an adventure" and as "an opportunity to learn and experience something unusual". The trial was also found quite short and all of the interviewees were ready and willing to continue with the trial (5/5).

Two of the interviewees wanted to join the trial, because they were interested in Scoopshot. The other one of them was also a huge fan of Omakaupunki which also inspired him to join. He had longed for action in Scoopshot and was surprised and delighted that specifically Omakaupunki organized the trial. One interviewee joined the trial for the interest in carrying out assignments. "Of course you must join and try out", said one of the interviewees.

The interviewees were asked about the expectations of the trial. One of them said that he had expected more basic and only a technical realization of the trial. He was surprised by the level of the assignments and that the photos were actually used with stories. He told about his expectations of the trial as follows:

> "In my opinion it was better than I had expected. I thought it would have been on more basic level. I did not expect the content being used, but I thought it to be more a technical trial. I was surprised of the level of the assignments, that they had a real purpose and they were used for something." Male, 34

The easiness and facility of Scoopshot, the trial itself and its functionality, having a clear assignment that makes one think a little and the energy of activating readers to join were seen as the most positive aspects of the trial.

Two of the interviewees thought, that the most negative thing with the trial was short validity of the assignments. One interviewee thought the topics of the assignments as the most negative aspect. He found the topics to be "last season" and much used, not as good as he wished for. He wished for topics, for example, of people doing some activities for the overall benefit or of a trip to a well-trodden island. One of them thought that the future impact on his work at the rescue services was the most negative aspect. He thought that if all reader reporters want to snap a photo of a fire, it will distract the rescue workers' operation on the scene of an accident.

Four of the interviewees would have wanted more assignments (4/5) and one of them wanted several assignments at the same time to choose from. Only one interviewee was quite satisfied with the amount of assignments received within the trial (1/5), although he answered in the questionnaire that the assignments were not delivered often enough. Also he wanted a lot of assignments to choose from. Two of the interviewees wanted to receive assignments weekly (2/5), one interviewee every second day (1/5) and two of them daily (2/5). An interviewee who wanted daily assignments noted that if Scoopshot would be widely used by media, one to three assignments per media a week would be enough.

The desired validity of the assignments was between one day and one week. All of the interviewees thought, that one week would be sufficient (5/5). Two of them said it might be even too long (2/5) and one of them said that it would be suitable. One day was said to be the minimum validity. Less than a day was accepted by one of the interviewees for a particular event and related issues. One of the interviewees said that a non-positional assignment with one-day validity would be the happy medium where assignments should end up after the trial period is over.

None of the interviewees mentioned about the reward being too small (0/5), rather the other way around. One interviewee said that 20 euros for a published photo would be enough, although the more the better. Two of the interviewees were worried about professional photographers' salary level being reduced or detracting from their jobs. One of the interviewees would be willing to send news photos to Scoopshot with 0 euros reward and one of them said that he would carry out assignments even without any reward if the assignment was interesting enough. One interviewee got more satisfaction from the fact that his photo influenced in repairing some fault, than from the reward he received. But then again, all the interviewees expressed that they did not mind little extra income.

#### 6.3.8 Assignments

The interviewees were asked specifically about three assignments: Cleaning the environment (validity 1 week, reward  $1 \in$ ), Tallinn shipping (validity 12 hours, reward  $1 \in$ ) and Street conditions (validity 1 day, reward 50  $\in$ ). Those assignments were chosen, because they differed from each other in validity. In addition, Tallinn shipping was the only location-based assignment and the Scoopshot reward in Street conditions was 50 euros and all the others only one euro. Other assignments except Street conditions had also a "Sanoma reward" for photos published in print media (see Table 8).

#### Cleaning the environment

Cleaning the environment was found a pleasant topic by all of the interviewees and all of them had submitted photos to the assignment. It was said to be a nice and even brilliant topic and that it made one take notice of the environment. Three of the interviewees thought that one week validity was adequate (3/5) and two of them thought it was somewhat long (2/5). The reward, 50 euros of published photos, was considered good and by one of the interviewees even too high. He would have been satisfied with 20 euros. One interviewee was more pleased about the fact, that the pile of rubbish he photographed was cleaned, than that he got a 50 euro reward for the photo.

#### Tallinn shipping

The comments on Tallinn shipping topic were rather neutral or slightly negative and the validity was considered quite short by all five interviewees (5/5). One interviewee had not even seen the assignment. One interviewee thought that this kind of validity would be suitable for topics like a sports event or a concert and one of them wished that the validity would be from 12 p.m. until the next day 12 p.m. He also thought that the assignment should have been cancelled or postponed for not being topical. Three of the interviewees would not have travelled to the harbor just for carrying out the assignment (3/5). These three were the ones categorized as randomly acting photojournalists.

#### Street conditions

The third assignment, Street conditions was considered a good and meaningful topic by four of the interviewees (4/5). One interviewee was not too excited about it, because he thought that he had no possibility to carry out the assignment for not having a car. He also said that 50 euros reward is suitable for this, because one would need a car to carry out the assignment. He mistakenly thought the topic was only about highway conditions. The same interviewee who had missed Tallinn shipping assignment had missed this assignment too. He would have found several subjects to be photographed. One interviewee was pleased by the fact, that soon after his photo had been published, the pothole had been fixed.

## 6.3.9 Scenarios

In order to get opinions on using augmented reality applications for participation in the future, four scenarios were created. The interviewees were asked to read through the scenarios (Appendix G). After reading each scenario they were asked their opinions about it, their willingness to use it and in what context. A summary of the interviewees' thoughts about the scenarios is tabulated in Table 13.

Scenario #	Willing to use	Would use for	Opinions	In news reporting
1	5/5	Photo assign-	Realistic, facilitative,	Location-based as-
Planning a		ments, spare	time-saving,	signments with precise
cycling trip		time plans	Scoopshot could have	directions, urgent in-
with a map of			this	formation e.g. from
assignments				eyewitnesses
2	3/5	Photos, infor-	Splendid idea, in-	Scoopshot for sending
Accident		mation submit-	creases accident tour-	assignments, real time
reporting		ting and receiv-	ism	traffic information
		ing		
3	2/5	Any content,	Interesting, good idea,	Lengthens the life of
Reading a		watching how	good way to add con-	news from one media
newspaper		other reader	tent to limited space,	to another, news ar-
		reporters had	troublesome, good	chive
		seen the as-	supplementary ser-	
		signment, elec-	vice, other photos	
		tronic newspa-	preferably in net gal-	
		per	lery to be searched	
			with keywords	
4	4/5	Watching con-	Entertainment, good	Company evaluation,
On a railway		tent, comment-	way to share locational	timetables, exceptions
station		ing, submitting	information, causes	in traffic, fault situa-
		photos, modern	argument, gossip col-	tions positive news,
		geocaching	umn, fun	topics for the gutter
				press

#### Table 13. Scenarios of future participation.

#### Scenario 1

The first scenario had a person planning a cycling trip using a map with assignments. She chooses to cycle 7 kilometres to make an interview. Pictures of the scenario can be seen in Figure 29.



Figure 29. Planning a cycling trip using a map with assignments.

The scenario was accepted positively by all the interviewees (5/5). It was said to be realistic and that Scoopshot could also have this function. One interviewee thought that the scenario was like Scoopshot taken further. The map view was said to be facilitative and time-saving. All of the interviewees were willing to take it in use as far as photo assignments were concerned. They could cycle several kilometres for an assignment if there was nothing else to do. One of them said that he already does that and did not think this as a scenario at all. He would rather act spontaneously though. Two of the interviewees said that they would not carry out interviewing assignments. The interviewees thought that this scenario could be used for news reporting by sending an assignment-based on location when urgent information is needed, such as interviews of eyewitnesses.

#### Scenario 2

Next scenario was about an accident nearby and a reader reporter reporting about it (see Figure 30).

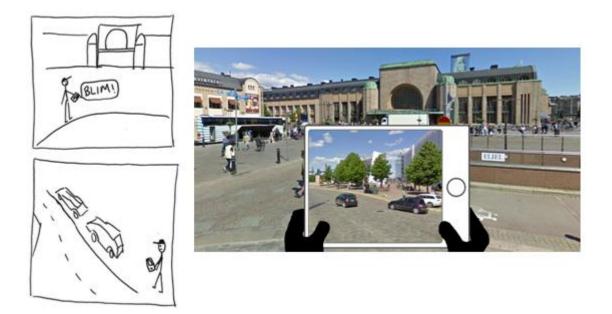


Figure 30. Accident reporting.

The scenario raised both positive and negative perceptions. Three of the interviewees liked the idea and were willing to use the application (3/5). One of them said it to be a splendid idea that he had been missing. He wanted to widen the audience of the submitted accident information to cover not just the newsroom but also other users of the application on the base station area. He also said that the information on normalized circumstances should be sent to all users as well. Two of the interviewees were not that excited. One of them said it is a belief that people are interested in accidents. The other one was concerned about his work at the rescue department being disturbed by the increasing accident tourism.

"Let us work in peace! This is kind of accident tourism, that will probably increase in the future." Male, 28

He thought this kind of application could be used in traffic reporting, but on the other hand it could jam the traffic even more. He himself would not use the application.

### Scenario 3

In the third scenario a person was reading a local newspaper and saw more content using his mobile phone's camera (see Figure 31).

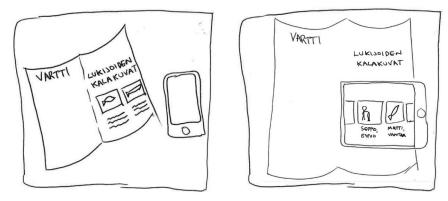


Figure 31. Additional content from a newspaper.

When asked after reading the scenario, what the interviewee thought about it, three of them first took notice of the reader's photo being published in the web gallery. One of them thought the photo was published without notifying the photographer and other one of them asked "Do you mean does it annoy me that a photo is published without a reward?" When asked would it annoy him, he answered that then he should read very carefully where he had pledged himself to and decide whether to argue about it or not. One of them said that he would not be disappointed if he did not get a reward and that the reporter chooses photos that appeal to him.

The scenario was said to be interesting, a good idea and a good way to add content to limited space. Only two of the interviewees said they would be willing to use the application. One of them was surprised that it is not already in use. He thought it was a good supplementary service that lengthens the life of news from one media to another. The other one said that it would be nice to see how other reader reporters had seen the assignment and it could be used in news as an archive. One of those who were not that eager to use the application did not like the idea of showing this way other photos submitted to an assignment. He would like them to be on the web and searchable with keywords. One of the interviewees thought it would be troublesome to use one's mobile with a printed newspaper, but he could use it with electronic newspaper though.

#### Scenario 4

The last scenario was about a person waiting for a train and spending time reading location-based content (see Figure 32).

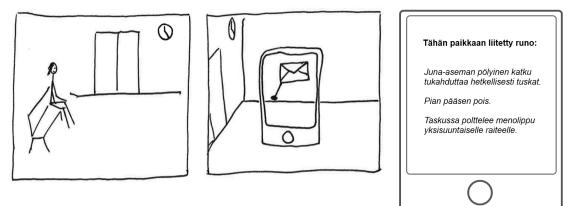


Figure 32. Location-based content.

It was said to be entertainment, good way to share locational information, a gossip column that causes argument. One of the interviewees said it to be fun, but he was not sure if he would use this kind of application. The other four thought they would and all of them for different purposes. One of them said that he would use it for watching and commenting the content. Another one would submit photos but not writings. One interviewee said that he would not share his thoughts this openly, but it would be a good idea to leave virtual landmarks to be found by his friends like modern geocaching as a hobby. One of the interviewees would use it for planning more pleasant environment, for example, sketching planting to railway station square.

Other ideas for using the application were evaluating companies and services, traffic timetables and exceptions, fault situations on the area and also positive news like the train was in time for change. One interviewee suggested that all the information should be available from one place, for example, Omakaupunki's mobile application. He thought that watching around through mobile camera looks fancy in demos, but using the application that way would be somewhat embarrassing and that it would be just a transitional period like 3D glasses. He preferred using it like normal application being able to gather information from user's selected limited area.

# 7 SUMMARY AND DISCUSSION

The goal of the research was to study what factors affect participation in crowdsourcing activities. The results of the study cannot be generalized due to the small sample. Only one sixth of the participants responded the questionnaire and of those who did not respond, we have no information whatsoever. However, the results show some guidance for future design concerning the usage of mobile assignments in reader reporter activities. The implications can be adapted to other types of crowdsourcing, too.

## 7.1 Summary

Participation preferences found in this study are quite similar to the preferences found in the previous studies introduced in chapter 3.5. Preferences found are the following.

Physical context:

- close to home, work or studies or en route
- distance maximum of five kilometres

Task context:

- on freetime and when nothing else to do Temporal context:
- in the evenings and during the weekends
- an hour to complete an assignment
- Technical context:
- a mobile application
- Assignment properties:
- themes for the youth
- photo, video and information acquisition assignment types
- validity for two days
- money or movie tickets as a compensation

## 7.2 Implications for design

#### Provide instructions for the application used

The activity during the trial was low. Only 13 % (14/104) of the participants submitted content to the assignments and only one participant submitted to three assignments. In the study of Väätäjä (2011) assignments were sent to participants via SMS and the activity was much higher. During the first month of the trial period approximately one third of the participants had carried out every assignment. In the Scoopshot study the first assignment was viewed by 84% of the participants and the last assignment only by 46 %. Assignments did not appear in participants' smart phones the same way as SMS messages. Moreover, the participants were not provided with specific installation and

configuration instructions of Scoopshot. Depending on the options selected, Scoopshot does or does not inform the user about new assignments available. This might have affected the degree of activity. The interviews support the assumption. One interviewee had not configured Scoopshot to alert about new assignments and he had missed two of them.

Based on the responses of the questionnaire, more young people were participating in the trial than in former study with readers of Sanoma Kaupunkilehdet (Väätäjä 2011). They were also less experienced in reader activities than the participants of the earlier study. Using the latest technology seems to be a possible way of getting a new group of readers to participate. However, new technology or new type of activity may also drive away some reader groups. In this study women's section of the questionnaire respondents was marginal compared to the earlier study (Väätäjä 2011).

#### Create assignments for different age groups

According to the questionnaire responses the participants were ready to put considerable effort to carrying out an assignment. The respondents were willing to travel five kilometers or more and spend time more than a half an hour for carrying out an assignment. Still the degree of activity was low. Young participants, aged from 15 to 25 years, were less active in carrying out assignments than participants over 25 years of age.

In spite of the willingness to travel, the second most common reason for not carrying out assignments was that one was not near the location. The most common reason was that a suitable subject was not found. Similar reasons were found in the study of Väätäjä (2011).

Based on the questionnaire responses all respondents were active in photographing. They shoot photos at least on a weekly basis, more than half of them daily (10/17). The interviews revealed that the participants preferred carrying out assignments to spontaneous news photographing. Four of five interviewees said it to be a nice change for photographing on their own initiative. This was the other way round in the study with older participants (Väätäjä 2011). They preferred spontaneous photographing for not limiting their own imagination. The fifth interviewee, who did not prefer assignments and was the oldest questionnaire respondent, shared this opinion.

#### Use gamification

The joy of completing interesting assignments seems to be an important motivation to participate. The preferred situation for carrying out assignments was on free time and when there is nothing else to do. The interviewees thought it to be pleasant pastime. Carrying out assignments was also considered as a challenge, a game or an adventure. Fun was also found an important motivation in the study of Väätäjä (2012). Gamification is a possibility to make carrying out assignments more enjoyable and challenging.

#### Send assignments in the afternoon

Most of the questionnaire respondents were willing to carry out assignments at anytime and anywhere, if they were nearby. Weekends and evenings were preferred times and near home, work or studies preferred locations to carry out assignments. The study of Alt et al. (2010) supports this. They found that the assignments were preferably carried out after work at home and surrounding areas.

#### Make the reader reporter feel important

Based on the questionnaire results, the assignments being interesting was the most common motivation for carrying out assignments. Searching for a suitable subject being nice and the wish to earn some money shared the second place. Only half of the respondents, who had submitted content, expressed the monetary reward being their motivation and less than one third of the respondents who did not submit content gave as their reason the rewards being too small. The interviewees considered the possibility to influence and cause overall benefit more important than the reward. However, in the studies of Alt et al. (2010), Väätäjä et al. (2011) and Väätäjä (2012), monetary reward was found essential for motivation.

Sending assignments widely with small monetary rewards or even without a reward might be more fruitful than few assignments with a high monetary reward. Also movie tickets or other monetary compensation instead of money should be taken into consideration when deciding the rewarding system. All income is taxable and also reduces welfare benefits as heard in the interviews of Jaakola (2012). In this study the most represented profession group were the students, who are often supported by the study grant.

#### Formulate small and simple assignments

Photo assignment was found the most pleasant assignment type. All of the questionnaire respondents were interested in carrying them out. Video assignments and information acquisition were also of interest. In the studies of Alt et al. (2010) photo tasks and informative tasks were more popular than action tasks. Väätäjä et al. (2012) found in their study that photo tasks and video tasks were equally preferred. Other task types in the study were writing a story and carrying out an interview.

These findings indicate that tasks requiring minimal effort and only a little time are the most preferred task types. It is recommendable to slice the tasks as small parts as possible and formulate them as simple and clear as possible.

#### Create three assignments a week

The assignments were wished for more often than weekly. An assignment every second or third day would be ideal. Also several assignments at a time to choose from were preferred. In the study of Väätäjä (2011) the preferred interval was one week, but also the results of that study indicated that several assignments at a time were preferred.

#### Set assignment validity at two days

In the questionnaire results the preferred validity for an assignment was two days. Also one day and one week were considered suitable by almost a half of the respondents. According to the interview results, the minimum validity for a non-urgent assignment was one day and the maximum one week. Similar results were found earlier (Väätäjä 2011). The validity of assignments related to a particular event and its additional activities can be less than a day.

#### Use a mobile application instead of SMS or MMS

The mobile application used in the trial was found convenient to use for assignmentbased participation. According to the interviewees, reader photos are snapped using a mobile phone instead of a separate camera. Submitting of photos using a mobile application was said to be easy and effortless. In addition, it is free of additional charge, because smart phone users usually have data subscription. Also in former study of Väätäjä et al. (2011) mobile application was found a preferred way of submitting content. This should be taken into consideration in future planning.

## 7.3 Self reflection

The goal or the study was to find out participation preferences and implications for future development of mobile crowdsourcing of news content. The anonymity of the participants set challenges in choosing methods for the study. Online questionnaire seemed to be the only choice to start with for such a large group of participants. The amount of respondents was lower than expected. Possible reason for this is that the participants were asked to send their email address as an answer to an assignment instead of sending them a link to the questionnaire.

The interviews were successful. The atmosphere was informal and relaxed making the interviewees eager to share their experiences. Even though the interviewees were only five, lot of interesting and new data was collected.

If I was starting the study now with this experience, I would like to change something. Firstly, the participants would get information on the application used, such as how to configure it for this purpose. Secondly, the first questionnaire would be short and designed to be responded via a mobile phone with just a few questions. The link to the questionnaire would be sent as an assignment. In the mobile questionnaire participants could add their contact information if they are interested in further questionnaire and interviews. Lastly, I would send another questionnaire assignment to all scoopshooters in Helsinki and Tampere area to survey a larger population.

# 8 CONCLUSIONS AND FUTURE WORK

Crowdsourcing is increasingly used for several purposes, including news content creation. Media organizations ask their readers to send photos, videos or stories of which journalists compose articles or publish the material as is. Especially local newspapers utilize this method in content creation, because their editorial staff is few in number due to limited monetary resources. Also the readers are willing to see material produced by someone like themselves and the material is considered trustworthy and authentic. The content asked for can be of particular events and topics or spontaneous, something that the readers themselves are interested in.

This study was about crowdsourced hyperlocal news content creation. What factors affect participation in crowdsourcing activities? What implications are found for future design concerning the usage of mobile assignments in reader reporter activities? In order to answer these questions a field trial with 104 participants was carried out in collaboration with Sanoma Kaupunkilehdet. The participants were sent weekly mobile assignments using Scoopshot application. After the trial period the experiences of the participants were surveyed with an online questionnaire and interviews.

On the whole, the participants found the trial a positive experience. It was thought to be interesting, nice and novel. According to the questionnaire responses, many young people were participating and the portion of women was marginal. The mobile application used for receiving assignments and submitting photos was found convenient to use for assignment-based participation. It was said to be effortless and straightforward. In addition, the submission of material being free of extra charge was found as a redeeming feature.

The questionnaire respondents were willing to receive more assignments and the preferred validity of an assignment was two days. They preferred carrying out assignments on free time and when there was nothing else to do. Most of them were willing to carry out assignments anywhere, but preferably close to home, work or studies. Despite the willingness to put effort for the action, the activity was low during the trial, especially on the young participants' side. More topics concerning the youth were wished for.

In future studies, it would be interesting to concentrate on gamifying aspects of crowdsourcing. The joy of completing interesting assignments was an important motivation. Carrying out mobile assignments seemed to be desired recreation and could be used for activating citizens. At the bus stop instead of waiting doing nothing, the passengers could report on a broken shelter, full garbage can or need of ploughing. Instead of playing console games on the sofa, players could roam the outdoors playing location-based photo orienteering. Combining crowdsourcing with gamification could be the key to activate even more young and youthful citizens to participate. The opportunities of crowdsourcing are boundless.

# REFERENCES

Alt, F., Shirazi, A. S., Schmidt, A., Kramer, U. & Nawaz, Z. 2010. Location-based Crowdsourcing: Extending Crowdsourcing to the Real World. NordiCHI '10 Proceedings of the 6th Nordic Conference on Human-Computer Interaction: Extending Boundaries, Reykjavik, Iceland, October 16-20, 2010. New York, NY, USA, 2010, ACM. pp. 13–22.

Amazon. 2013. Mechanical Turk [WWW]. [Accessed 16.2.2013]. Available at: https://www.mturk.com/mturk/welcome.

Borst, I. 2010. Understanding Crowdsourcing - Effects of Motivation and Rewards on Participation and Performance in Voluntary Online Activities [Online document]. Doctoral dissertation, Erasmus University Rotterdam. [Accessed on 17.3.2013]. Available at: http://repub.eur.nl/res/pub/21914/EPS2010221LIS9789058922625.pdf.

Brabham, D.C. 2008. Moving the crowd at iStockphoto: The composition of the crowd and motivations for participation in a crowdsourcing application. First Monday [WWW]. 13, 6. [Accessed on 3.2.2013]. Available at: http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2159/1969.

Brabham, D.C. 2010. Moving the crowd at Threadless: Motivations for participation in a crowdsourcing application. Information, Communication & Society 13.8, pp. 1122–1145.

Buehner, T. 2012. The Refrigerator as a Megaphone: Addressing the Motivations of Citizen Photojournalists. 2012. Unpublished article. 34 p.

Chandler, D. & Kapelner, A. 2012. Breaking Monotony with Meaning: Motivation in Crowdsourcing Markets [Online Document]. Journal of Economic Behavior & Organization 87. 2013, Elsevier B.V. [Accessed on 27.4.2013]. Available at: http://www.sciencedirect.com/science/article/pii/S016726811300036X.

Columbia University. 2012. The 2012 Pulizer Prize Winners. Breaking News Reporting [WWW]. [Accessed on 26.11.2012]. Available at: http://www.pulitzer.org/citation/2012-Breaking-News-Reporting.

Deci, E. L., Koetner, R. & Ryan, R. M. 1999. A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation. Psychological Bulletin. 1999, Vol. 125, No. 6, pp. 627–668. Copyright 1999 by the American Psychological Association, Inc.

Eagle, N. 2009. txteagle: Mobile Crowdsourcing. Internationalization, Design and Global Development, Lecture Notes in Computer Science 5623, 2009. Berlin Heidelberg, Germany, 2009, Springer. pp. 447–456.

Estellés-Arolas, E. & González-Ladrón-de-Guevara, F. 2012. Towards an integrated crowdsourcing definition. Journal of Information Science 38, 2, pp. 1–14.

Gupta, A., Thies, W., Cutrell, E. & Balakrishnan, R. 2012. mClerk: Enabling Mobile Crowdsourcing in Developing Regions. CHI'12 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Austin, Texas, USA, May 5-10, 2012. New York, NY, USA, 2012, ACM. pp. 1843–1852.

Hellström, J. & Karefelt, A. 2012. Participation Through Mobile Phones: A Study of SMS Use During the Ugandan General Elections 2011. ICTD'12 Proceedings of the Fifth International Conference on Information and Communication Technologies and Development . Atlanta, GA, USA, March 12–15, 2012. New York, NY, USA, 2012, ACM. pp. 249–258.

Howe, J. 2006. The Rise of Crowdsourcing. Wired Magazine 14.06 [WWW]. [Accessed on 27.11.2012]. Available at: http://www.wired.com/wired/archive/14.06/crowds.html.

Howe, J. 2009. Crowdsourcing. How the Power of the Crowd is Driving the Future of Business. London, UK, Random House Business Books. 302 p.

Huotari, K. & Hamari, J. 2012. Defining Gamification - A Service Marketing Perspective. MindTrek '12 Proceeding of the 16th International Academic MindTrek Conference, Tampere, Finland, October 3–5, 2012. New York, NY, USA, 2012, ACM. pp. 17– 22.

Hänska-Ahy, M. T. & Shapour, R. 2012. Who's reporting the protests?: converging practices of citizen journalists and two BBC World Service newsrooms, from Iran's election protests to the Arab uprisings. Journalism Studies 13, 5–6, pp. 1–17.

InnoCentive. 2013. Frequently Asked Questions [WWW]. [Accessed on 24.2.2013]. Available at: http://www.innocentive.com/faq/Seeker#25n1221.

Jaakola, M. 2013. Improving the Quality of User-Generated Content: online Feedback Mechanisms. Master's thesis, Department of Pervasive Computing, Tampere University of Technology.

Jumisko-Pyykkö, S & Vainio, T. 2010. Framing the Context of Use for Mobile HCI. International Journal of Mobile Human Computer Interaction 2, 4, pp. 1–18.

Kaufmann, N., Schulze, T. & Veit, D. 2011. More than fun and money. Worker Motivation in Crowdsourcing – A Study on Mechanical Turk. Proceedings of the Seventeenth Americas Conference on Information Systems, Detroit, Michigan, USA, August 4–7, 2011. AMCIS 2011 Proceedings - All Submissions, Paper 340.

Kiva. 2013. Loans that save lives [WWW]. [Accessed on 9.3.2013]. Available at: http://www.kiva.org.

Lai, S. 2011. Iconic Images and Citizen Journalism. iConference 2011 Proceedings of the 2011 iConference, Seattle, WA, USA, February 8–11, 2011. New York, NY, USA, 2011, ACM. pp. 702–703.

Lakhani, K. R., Jeppesen, L. B., Lohse, P. A. & Panetta, J. A. 2007. The value of openness in scientific problem solving [Online Document]. Harvard Business School Working Paper 07-050. [Accessed on 9.3.2011]. Available at: http://www.hbs.edu/research/pdf/07-050.pdf.

López Guillén, K. I., Flores Mendoza, U. & Welti Santos, L. 2011. Crowdmap and Ushahidi: to obtain and visualize traffic congestion information in Mexico City. 4th ACM SIGSPATIAL International Workshop on Computational Transportation Science, Chicago, Illinois, USA, November 1, 2011. New York, NY, USA, 2011, ACM. pp. 24–27.

Malone, T. W., Laubacher, R. & Dellarocas, C. 2010. Harnessing Crowds: Mapping the Genome of Collective Intelligence. MIT Sloan School Working Paper 4732-09. Center for Collective Intelligence, Massachusetts Institute of Technology.

Metzgar, E.T., Kurpius, D.D. & Rowley, K.M. 2011. Defining hyperlocal media: Proposing a framework for discussion. New Media & Society 13, 5. pp. 772–787.

Parkkonen, S. 2013. Relevant hyperlocal news more efficiently than ever [online slides]. Next Media, TIVIT programme. [Accessed on 24.3.2013]. Available at: http://virtual.vtt.fi/virtual/nextmedia/Tulosseminaari\_6\_2\_2013\_esitykset/8\_Parkkonen \_Tulosseminaari.pdf.

Rogstadius, J., Kostakos, V., Kittur, A., Smus, B., Laredo, J. & Vukovic, M. 2011. An Assessment of Intrinsic and Extrinsic Motivation on Task Performance in Crowdsourcing Markets. Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media, Barcelona, Spain, July 17–21, 2011. pp. 321–328.

Ryan, R. M. & Deci, E. L. 2000. Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. Contemporary Educational Psychology 25, 1, pp. 54–67.

Saldaña, J. 2009. The Coding Manual for Qualitative Researches. London, UK, SAGE Publications Ltd. 223 p.

Salen, K. & Zimmerman, E. 2004. Rules of Play, Game Design Fundamentals. London, UK, The MIT Press. 672 p.

Schulze, T., Seedorf, S., Geiger, D., Kaufmann, N. & Schader, M. 2011. Exploring task properties in crowdsourcing – An empirical study on MechanicalTurk. 19th European Conference on Information Systems (ECIS), Helsinki, Finland, June 9–11, 2011. Paper 122.

Stevens, M. & D'Hondt, E. 2010. Crowdsourcing of Pollution Data using Smartphones. UbiComp '10 Workshop on Ubiquitous Crowdsourcing. Copenhagen, Denmark, 26–29 September, 2010.

The National Library of Finland. 2012. Digitalkoot [WWW]. [Accessed on 27.1.2013]. Available at: http://digitalkoot.fi.

Vinblad, S. 2011. Yleläisenä sosiaalisessa mediassa – Sosiaalisen median käyttäminen ja hyödyntäminen toimitustyössä [WWW]. Thesis. Kemi-Tornion ammattikorkeakoulu. [Accessed on 16.8.2012]. Available at: http://publications.theseus.fi/bitstream/ handle/10024/27776/Vinblad\_Suvi\_K2011.pdf?sequence=1.

Von Ahn, L. 2006. Human Computation [Video]. Google TechTalks, July 26, 2006. [Accessed on 3.2.2013]. Available at: http://www.youtube.com/watch?v=tx082gDwGcM.

Von Ahn, L. & Dabbish, L. 2004. Labeling Images with a Computer Game. CHI '04 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Vienna, Austria, April 24–29, 2004. New York, NY, USA, 2004, ACM. pp. 319–326.

Von Ahn, L. & Dabbish, L. 2008. Designing Games with a Purpose. Communications of the ACM, 51,8. New York, NY, USA, 2004, ACM. pp. 58–67.

Väätäjä, H., Vainio, H., Sirkkunen, E. & Salo, K. 2011. Crowdsourced news reporting: Supporting news content creation with mobile phones. MobileHCI '11 Proceedings of the 13th International Conference on Human Computer Interaction with Mobile Devices and Services, Stockholm, Sweden, August 30 - September 2, 2011. New York, NY, USA, 2011, ACM. pp. 435–444.

Väätäjä, H. 2011. Mobile reader reporters' user experience factors [online document]. Next Media, TIVIT programme. [Accessed on 27.11.2012]. Available at: http://virtual.vtt.fi/virtual/nextmedia/Deliverables-2011/D3.2.1.7\_HYPERLOCAL\_Mob ile%20reader%20reporters%20user%20experience%20factors.pdf.

Väätäjä, H., Egglestone, P. 2012. Briefing news reporting with mobile assignments: Perceptions, needs and challenges. CSCW '12 Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work, Seattle, Washington, USA, February 11–15, 2012. New York, NY, USA, 2012, ACM. pp. 485–494.

Väätäjä, H. 2012. Readers' Motivations to Participate in Hyperlocal News Content Creation. GROUP'12 Proceedings of the 17th ACM international conference, Sanibel Island, Florida, USA, October 27–31, 2012, ACM. pp. 309–312.

Väätäjä, H., Vainio, T. & Sirkkunen, E. 2012. Location-based crowdsourcing of hyperlocal news: Dimensions of participation preferences. GROUP'12 Proceedings of the 17th ACM international conference, Sanibel Island, Florida, USA, October 27–31, 2012. New York, NY, USA, 2012, ACM. pp. 85–94.

Wardle, C. & Williams, A. 2008. ugc@thebbc: Understanding its impact upon contributors, non-contributors and BBC News [online document]. Cardiff, UK, Cardiff School of Journalism, Media and Cultural Studies. [Accessed on 27.11.2012]. Available at: http://www.bbc.co.uk/blogs/knowledgeexchange/cardiffone.pdf.

Wunsch-Vincent, S. & Vickery, G. 2007. Participative Web: User-Created Content [online document]. Organisation for Economic Co-operation and Development (OECD), Directorate for Science, Technology and Industry. [Accessed on 27.11.2012]. Available at: http://www.oecd.org/dataoecd/57/14/38393115.pdf.

## Appendix A: Assignments of the Scoopshot trial

Common to all assingments:

Subject: "Oma kaupungin kuvaustehtävä"

**Content description**: "Jotta palkkio pystytään maksamaan, liitä lähettämääsi kuvaan aina puhelinnumerosi. Yhteystietosi jää ainoastaan toimituksen käyttöön."

#	Description	Start	End	Validity	Scoopshot	
					Reward €	Reward €
1	Pääkaupunkiseudun yhteiset siivoustalkoot alkavat huhtikuun puolivälissä. Mitkä yleiset alueet kaipaavat siivousta kipeästi? Kuvaa roskien valtaama puisto, metsikkö, puronvarsi tai tienpientare, jonka toivot talkoolaisten putsaavan kuntoon.	14:29	3.4.2012 14:29	6 days 23 hours	1,00	50,00
2	Tallinnan laivaliikenteestä odotetaan tulevana kesänä erittäin vilkasta. Nopeat alukset aloittelevat juuri nyt liikennöintiä. Lähetä kuva Helsingin satamien matkustaja- aluksista.	9:52	4.4.2012 21:50	11 hours 57 minutes	1,00	50,00
3	Mihin pääkaupunkiseudulla kaivattaisiin meluaitoja? Kuvaa paikka, johon tarvittaisiin uusi melueste ja perustele miksi se olisi tarpeen. Voit myös kuvata paikan, jossa melueste jo on, ja kertoa viestissäsi, toimiiko melueste toivotulla tavalla ja miellyttääkö se silmää.	15:48	13.4.2012 15:48	1 day 23 hours	1,00	-
4	Missä on pääkaupunkiseudun paras koirapuisto? Mainitsethan viestissäsi missä kuvaamasi koirapuisto sijaitsee. Voit myös kertoa miksi lemmikit ja niiden omistajat viihtyvät puistossa tai mitä parannuksia sinne toivotaan.	11:49	20.4.2012 11:49	1 day 23 hours	1,00	Movie tickets
5	Onko pääkaupunkiseudun pääväylien asvaltti kehnossa kunnossa? Ammottaako tiessä paha kuoppa? Söikö routa päällysteen? Kerrothan viestissäsi miltä tieosuudelta ottamasi kuva on.	12:30	27.4.2012 12:30	1 day	50,00	-

## Appendix B: Online questionnaire

Kysely Vartin, Metron ja Omakaupunki.fi:n Scoopshot –lukijareportterikokeiluun osallistuneille

Hei,

Tervetuloa Vartin, Metron ja Omakaupunki.fi:n Scoopshot -lukijareportterikokeilun kyselyyn!

Toivomme, että vastaat kyselyyn riippumatta siitä, oletko vastannut Scoopshotin kautta lähetettyihin tehtäviin vai et. Vastaamiseen menee aikaa n. 10 minuuttia.

Kyselyyn vastaamisesta saa palkkioksi kaksi elokuvalippua. Osallistumisesi kyselyyn on tärkeää ja arvostamme näkemyksiäsi.

Kyselyn toteuttamisesta ja aineiston analyysistä vastaa Tampereen teknillisen yliopiston Ihmiskeskeisen teknologian yksikkö. Aineisto analysoidaan ja raportoidaan ilman henkilön tunnistamisen mahdollistavia tietoja.

Tutkimus ja lukijareportteritoiminnan kehittäminen liittyy Next Media tutkimusohjelmaan (http://www.nextmedia.fi/). Kyselyn tuloksia käytetään Sanoma Kaupunkilehdissä lukijareportteritoiminnan jatkokehittämiseen.

Vastaathan kyselyyn perjantaihin 8.6.2012 mennessä.

Kyselyn lopussa pyydetään nimesi ja osoitteesi palkkion toimittamista varten. Tietojasi ei käytetä muuhun tarkoitukseen.

Kiitokset etukäteen vastauksistasi!

Hyvää kesää toivottaen,

Heli Väätäjä, TTY/IHTE

Lisätietoja kyselystä tai tutkimuksesta:

Heli Väätäjä, heli.vaataja@tut.fi, 040 198 1406

Tampereen teknillinen yliopisto, Ihmiskeskeinen teknologia

Lisätietoja kokeilusta:

Tuukka Muhonen, tuukka.muhonen@sanoma.fi

Sanoma Kaupunkilehdet

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## <u> Scoopshot -kokeilu</u>

1. Millainen kokeilu mielestäsi oli? Jatka lausetta 1 - 3 tavalla. Kokeilu oli mielestäni

1 \*

2

3

2. Scoopshot sopii tehtävien vastaanottamiseen \*

0 – 10 (0=Ei lainkaan, 10=Erittäin hyvin)

3. Scoopshot sopii kuvien lähettämiseen \*

0-10 (0=Ei lainkaan, 10=Erittäin hyvin)

4. Olitko käyttänyt Scoopshot -sovellusta ennen Vartin, Metron ja Omakaupunki.fi:n Scoopshot -kokeilua? \*

Kyllä / Ei

5. Vastasitko kuvaustehtäviin? \*

Kyllä / Ei

6. Vastasin kuvaustehtäviin, koska (voit valita useita vaihtoehtoja)

Tehtävät kiinnostivat minua

Sopiva kuvauskohde löytyi helposti

Olin sopivan kuvauspaikan lähistöllä

Halusin tienata hieman rahaa

Sopivan aiheen etsiminen on mukavaa

Kuvaaminen on minulle harrastus

Halusin tuoda esiin tärkeitä aiheita

Omat kuvat julkaistaan todennäköisemmin tällä tavalla

Tehtävien tekeminen on minulle harrastus

Muu syy, mikä?

7. En vastannut kuvaustehtäviin, koska (voit valita useita vaihtoehtoja)

Tehtävät eivät kiinnostaneet minua

En löytänyt sopivaa kuvauskohdetta

Minulla ei ollut aikaa

En usko saavani palkkiota

En nähnyt tehtäviä / En seurannut sovellusta

Tehtävien kesto oli liian lyhyt

Tehtävät olivat liian vaikeita

Palkkiot olivat liian pieniä

Tehtävillä on liian monta kuvaajaa

En ollut kuvauskohteiden lähistöllä

Muu syy, mikä?

#### Kokeilun toteutuminen

8. Tuliko tehtäviä mielestäsi riittävän usein?\*

Kyllä / Ei / En osaa sanoa

9. Mitä mieltä olet lähetettyjen Scoopshot -tehtävien kestosta? \*

Liian lyhyt Melko lyhyt Sopiva Melko pitkä Liian pitkä

1⁄2 vuorokautta

1 vuorokausi

2 vuorokautta

1 viikko

10. Tehtävien aiheita olivat siivoustalkoot, Tallinnan laivaliikenne, meluaidat, paras koirapuisto ja teiden kunto. Mitä mieltä olet tehtävien aiheista? Tehtävien aiheet olivat mielestäni \* (voit valita useita vaihtoehtoja)

Tärkeitä

Helppoja

Ei motivoivia

Hyödyllisiä

Tylsiä

Vaikeita

Yhteisöllisiä

Muu, millaisia?

#### Lukijan materiaali

11. Millainen on sinun mielestäsi hyvä lukijankuva? Kuvaile vapaasti. \*

Hyvä lukijankuva on mielestäni

12. Millainen on sinun mielestäsi hyvä lukijanjuttu? Kuvaile vapaasti. \*

Hyvä lukijanjuttu on mielestäni

13. Millainen on sinun mielestäsi hyvä lukijanvideo? Kuvaile vapaasti. \*

Hyvä lukijanvideo on mielestäni

## <u>Tehtävät</u>

14. Millaisia tehtäviä sinua kiinnostaisi tehdä? \* (voit valita useita vaihtoehtoja)

Kuvatehtävä

Videointitehtävä

Selittävän / informatiivisen tekstin kirjoitus (esim. valokuvaamaasi tai selvittämääsi teemaan liittyen)

Information hankinta (esim. uusien perunoiden hinnan selvittäminen torilla tai kevätlintujen saapuminen)

Lyhyen jutun kirjoitus

Reaaliaikaisen videokuvan lähetys (esim. vappumarssista)

Haastattelu (esim. katugallup jääkiekon lippuhinnoista tai pysäköinninvalvonnasta)

Muita, millaisia?

#### Käyttökonteksti

15. Missä suorittaisit tehtäviä mieluiten? Suorittaisin tehtäviä mieluiten \* (voit valita useita vaihtoehtoja)

Kodin lähistöllä

Työ- / opiskelupaikan lähellä

Keskikaupungilla

Työ- / koulumatkan varrella

Kauppareissulla

Missä tahansa, jos olen lähistöllä

Muualla, missä?

16. Millaisissa tilanteissa suorittaisit tehtäviä mieluiten? Suorittaisin tehtäviä mieluiten \*

Vapaa-ajalla

Työ- / koulupäivän aikana

Silloin, kun ei ole muuta tekemistä

Muussa tilanteessa, missä?

17. Maksimietäisyys tehtävää suorittamaan olisi \*

1 km

2 km

5 km

10 km

15 km

Yli 15 km

18. Tekisin tehtäviä mieluiten \* (voit valita useita vaihtoehtoja)

Arkipäivinä

Viikonloppuisin

Aamulla

Päivällä

Illalla

Milloin tahansa

Muuna aikana, milloin?

19. Olisin valmis käyttämään aikaa tehtävän tekemiseen (mukaan lukien matka, tehtävän suoritus ja materiaalin lähetys) \*

1-5 minuuttia

Alle 10 minuuttia

10-30 minuuttia

Korkeintaan tunnin

Yli tunnin

Muun ajan, minkä?

#### <u>Aiempi osallistuminen</u>

20. Oletko lähettänyt lukijankuvia ennen Vartin, Metron ja Omakaupunki.fi:n Scoopshot -kokeilua? \*

Kyllä

Ei

21. Miten usein keskimäärin olet viimeisen puolen vuoden aikana lähettänyt lukijankuvia seuraaviin kohteisiin ennen Scoopshot -kokeilua? \*

Päivittäin Vähintään 4 kertaa viikossa Viikottain Kuukausittain Harvemmin kuin kuukausittain En koskaan

Omakaupunki.fi/Vartti/Metro

Muut uutismediat

#### Scoopshot

#### **Taustatiedot**

22. Ikä \*

23. Sukupuoli \*

Nainen

Mies

24. Koulutus \* (valitse korkein aste)

Peruskoulu

Ylioppilas

Ammattitutkinto

Ammattikorkeakoulututkinto

Alempi korkeakoulututkinto

Ylempi korkeakoulututkinto

Muu koulutus

25. Ammatti / tehtävä \*

26. Mikä puhelimesi merkki ja malli on (jos tiedät)?

27. Millainen on nykyinen matkapuhelimesi? \*

Peruspuhelin

Älypuhelin

28. Mihin käytät matkapuhelintasi? Valitse itseäsi parhaiten kuvaava vaihtoehto. \*

Pääasiassa soittamiseen ja tekstiviesteihin

Edellä mainittujen lisäksi käytän myös puhelimen herätyskelloa, kameraa, soitinta, radiota ja/tai kalenteria

Edellä mainittujen lisäksi käytän myös puhelimen web-selainta, sähköpostia, sosiaalisen median sovelluksia ja/tai lataan puhelimeen sovelluksia

29. Miten usein valokuvaat? \*

Päivittäin

Viikoittain

Kuukausittain

Harvemmin

30. Miten usein kuvaat videoita? \*

Päivittäin

Viikoittain

Kuukausittain

Harvemmin

31. Kerro vapaasti ideoita ja anna palautetta lukijoiden osallistumiseen, tehtävänantoihin, osallistumisen huomioimiseen tai muuhun kokeilun asiaan liittyen.

32. Voiko sinuun ottaa yhteyttä noin tunnin mittaisen haastattelun sopimiseksi liittyen lukijoiden osallistumiseen toimintaan? Haastattelusta saa palkkioksi kaksi leffalippua. \*

Kyllä / Ei

## Yhteystiedot haastattelun sopimista varten

33. Täydennä yhteystietosi haastattelun sopimista varten. Yhteystietojasi ei käytetä muuhun tarkoitukseen eikä niitä luovuteta eteenpäin.

Sähköposti, Matkapuhelin

## **<u>Yhteystiedot</u>**

34. Täydennä nimesi ja osoitteesi palkkion toimittamista varten. Yhteystietojasi ei käytetä muuhun tarkoitukseen eikä niitä luovuteta eteenpäin.

Nimi, Osoite

# Appendix C: Themes of the online questionnaire

Question category	Question theme		
The trial	General impression of the trial		
Scoopshot	Suitability in receiving assignments		
	Suitability in submitting photos		
	Usage prior to the trial		
Participation in the trial	Responding to assignments		
	Motivations for responding		
	Reasons for not responding		
Assignments	Frequency		
	Validity		
	Topics		
Readers' material	Good reader's photo		
	Good reader's story		
	Good reader's video		
Types of assignments	Assignment types interested in		
Context of use	Situation		
	Occasion		
	Maximum distance		
	Time of the day / week		
	Maximum time		
Former participation	Participated or not		
	Frequency of submitting photos		
Background information	Age		
	Gender		
	Education		
	Profession		
Phone information	Brand and model		
	Type of phone		
	Phone usage		
Photography	Photographing frequency		
	Video photographing frequency		
Ideas	Ideas and feedback		
Interview request	Clear for contacting		
	Contact information		
Contact information	Contact information for the reward		

## Appendix D: Assignment descriptions questionnaire

(All responds included in italics)

Kuvittele itsesi vastaanottamassa lukijareportteritehtäviä matkapuhelimeesi.

Kuvaile adjektiivein millainen tehtävä mielestäsi on. Täydennä lauseet.

1. Kaupungin yhteiset siivoustalkoot alkavat huhtikuun puolivälissä. Mitkä yleiset alueet kaipaavat siivousta kipeästi? Kuvaa roskien valtaama puisto, metsikkö, puronvarsi tai tienpientare, jonka toivot talkoolaisten putsaavan kuntoon.

Tehtävä on mielestäni

sotkuinen, mutainen, työläs, hankala, märkä, vaivalloinen, epämukava, tärkeä, hyödyllinen, sosiaalinen, ympäristöystävällinen, ei motivoiva, ponnisteluja vaativa, käytännöllinen, yleishyödyllinen, ei jännittävä, ei taiteellisuutta vaativa, ankea, lattea, ympäristöystävällinen, luontoon keskittyvä, kollektiivinen, hyväntahtoinen, yhteisöllinen, jokakeväinen, keskustelua herättävä

2. Tallinnan laivaliikenteestä odotetaan tulevana kesänä erittäin vilkasta. Nopeat alukset aloittelevat juuri nyt liikennöintiä. Lähetä kuva Helsingin satamien matkustaja-aluksista.

Tehtävä on mielestäni

mahdoton toteuttaa, helppo, tylsä, kaukainen, näyttävä, tarpeeton, arkinen, kaupallinen, tuulinen, avara, rauhallinen, mukava, inspiroiva, maailmaa avartava, merellinen, mielenkiintoinen, kiva, kesäinen, selkeä, turha

**3.** Mihin kaivattaisiin meluaitoja? Kuvaa paikka, johon tarvittaisiin uusi melueste ja perustele miksi se olisi tarpeen. Voit myös kuvata paikan, jossa melueste jo on, ja kertoa viestissäsi, toimiiko melueste toivotulla tavalla ja miellyttääkö se silmää.

Tehtävä on mielestäni

työläs, meluisa, hankala, vaarallinen, tylsä, haastava, tärkeä, suojaava, yhteiskunnallinen, hyödyllinen, hyvin kuvattu, vaikea, aikaa vievä, ei mielenkiintoinen, ankea, urbaani, ihmisiä huomioiva, rauhallinen, idyllinen, ei kiinnostava, yhteisöllinen

4. Missä on paras koirapuisto? Mainitsethan viestissäsi missä kuvaamasi koirapuisto sijaitsee. Voit myös kertoa miksi lemmikit ja niiden omistajat viihtyvät puistossa tai mitä parannuksia sinne toivotaan.

Tehtävä on mielestäni

vaikea, aikaavievä, ei kiinostava, epäselvä, arkinen, lähellä ihmisiä, ajankohtainen, tylsähkö, naseva, hauska, vilkas, (teennäisen) sympaattinen, mieluisa, mielenkiintoinen, harrastuksellinen, koiraystävällinen, yhteisöllinen, kutsuva, spesifi

5. Onko pääväylien asvaltti kehnossa kunnossa? Ammottaako tiessä paha kuoppa? Söikö routa päällysteen? Kerrothan viestissäsi miltä tieosuudelta ottamasi kuva on.

Tehtävä on mielestäni

vaivalloinen, tylsä, harmaa, työnomainen, ankea, tärkeä, jokapäiväinen, helppo, hauska, hyödyllinen, epäinformatiivinen, vaikea, mitään sanomaton, (teennäisen) mielenkiintoinen, jännittävä, yhteisvastuullinen, yhteisöllinen, provosoiva

## Kommentteja:

"Näitä tehtäviä ei voi kuvata adjektiiveilla, vaan pitäisi kuvata kokonaisilla lauseilla."

# Appendix E: Quality attributes

Adjektiivi	Lkm
aikaa vievä	2
ajankohtainen	1
ankea	3
arkinen	2
avara	1
avoin	1
ei jännittävä	1
ei kiinnostava	2
ei kuvauksellinen	1
ei mielenkiintoinen	2
ei mieluisa	1
ei motivoiva	1
ei taiteellisuutta vaativa	1
epäesteettinen	1
epäinformatiivinen	1
epämukava	1
epäselvä	1
haastava	1
haiseva	1
hankala	2
harmaa	1
harrastuksellinen	1
hauska	3
helppo	6
hyvin kuvattu	1
hyväntahtoinen	1
hyödyllinen	6
idyllinen	1
ihmisiä huomioiva	1
iloinen	1
inspiroiva	1
jokakeväinen	1
jokapäiväinen	1
jännittävä	1
kaukainen	1
kaupallinen	1
keskustelua herättävä	1
kesäinen	1
kiva	1
koiraystävällinen	1
kolea	1
kollektiivinen	1
kutsuva	1
käytännöllinen	1
lattea	1
leikkisä	1

Adjektiivi	Lkm
luontoon keskittyvä	1
lähellä ihmisiä	1
maailmaa avartava	1
mahdoton toteuttaa	1
meluisa	1
merellinen	1
mielenkiintoinen	1
mitäänsanomaton	1
mukava	1
mutainen	1
märkä	1
näyttävä	1
ponnisteluja vaativa	1
provosoiva	1
rauhallinen	2
selkeä	1
sosiaalinen	1
sotkuinen	1
spesifi	1
suojaava	1
tarpeeton	1
teennäisen mielenkiintoinen	1
teennäisen sympaattinen	1
tekninen	1
turha	1
tuulinen	1
tylsä	8
tylsähkö	1
työläs	2
työnomainen	1
tärkeä	6
täynnä mahdollisuuksia	1
urbaani	1
vaarallinen	1
vaikea	4
vaikea tietää mitä halutaan	1
vaikea toteuttaa	1
vaivalloinen	2
viinanhuuruinen	1
vilkas	1
yhteiskunnallinen	1
yhteisvastuullinen	1
yhteisöllinen	4
yleishyödyllinen	1
ympäristöystävällinen	2

## **Appendix F: Interview structure**

## Haastattelurunko

## **Taustatiedot**

Aloitetaan yleisellä kuvaustaustallasi:

## Kuvaaminen

- 1. Kertoisitko hieman kuvaustaustasi? (mitä, millä, mitä?)
- 1.1. Valokuvat
- 1.2. Videot

Seuraavaksi jutellaan lukijareportteritoiminnasta yleisesti:

## Lukijareportterius

- 2. Kertoisitko miten tulit lähteneeksi mukaan lukijareportteritoimintaan
- 2.1. (kuvat, videot, uutisvinkit, lukijanjutut tmv)?
- 2.2. Pyydä kertomaan ekasta kerrasta
- 3. Milloin aloitit osallistumisen?
- 4. Millä eri tavoin olet osallistunut?
- 4.1. Miten se on muuttunut ajan myötä?
- 4.2. Mihin olet lähettänyt?
- 4.3. Miten usein lähetät (eri sisältöjä) nykyisin?
- 5. Mikä saa sinut osallistumaan lukijatoimintaan?
- 6. Millaisista asioista haluat kertoa kuvilla/jutuilla?
- 7. Milloin tunnet onnistuneesi?

8. Kertoisitko esimerkin jostakin mieleen painuneesta onnistumisesta (ja/tai itsellesi merkittävästä lukijatoimintaan osallistumisesta?)

## Lukijakuvaaminen yleisesti

- 9. Mihin kiinnität huomiosi, kun kuvaat lukijankuvia?
- 9.1. Kuvailisitko, mitä "x" tarkoittaa.
- 9.2. Miksi kiinnität huomiosi näihin seikkoihin?
- 10. Lähetätkö kuvien lisäksi muuta materiaalia tai informaatiota?
- 10.1. Millaista?

#### Laatu

11. Millaisia lukijankuvia / videoita / juttuja katsot tai luet?

#### Lukijankuvat

- 12. Minkä verran seuraat muiden lukijoiden ottamia kuvia?
- 12.1. Mihin asioihin kiinnität huomiosi lukijankuvissa?
- 12.2. Voitko selittää, onko x positiivinen vai negatiivinen asia?
- 12.3. Mikä tekee kuvasta mielestäsi julkaisemisen arvoisen?

## Lukijanjutut

- 13. Minkä verran luet lukijoiden tekemiä juttuja?
- 13.1. Mihin asioihin kiinnität huomiota lukiessasi niitä?
- 13.2. Voitko selittää, onko x positiivinen vai negatiivinen asia?
- 13.3. Mikä tekee lukijanjutusta mielestäsi julkaisemisen arvoisen?

#### Lukijanvideot

- 14. Minkä verran katsot lukijoiden kuvaamia uutisvideoita?
- 14.1. Mihin asioihin kiinnität huomiota lukijanvideoissa?
- 14.2. Voitko selittää, onko x positiivinen vai negatiivinen asia?
- 14.3. Mikä tekee lukijanvideosta mielestäsi julkaisemisen arvoisen?

## <u>Scoopshot –kokeilu</u>

Puhutaan seuraavaksi Scoopshot -kokeilusta.

#### **Osallistuminen Scoopshotilla**

- 16. Mihin asioihin kiinnitit huomiota kokeilussa?
- 17. Mitä ajatuksia, tuntemuksia tai ideoita kokeiluun liittyen on tullut mieleesi?
- 18. Miten tulit lähteneeksi mukaan kokeiluun? (Mikä innosti / kiinnosti sinua?)
- 19. Millaisia odotuksia sinulla oli?
- 20. Miten kokeilu vastasi odotuksiasi?
- 21. Mikä on ollut positiivisin kokemuksesi/mikä on ollut positiivisinta?
- 22. Mikä on ollut negatiivisin kokemuksesi/mikä on ollut negatiivisinta?
- 23. Kerrotko omasta osallistumisestasi kokeiluun. (mitä, miksi, miten)

#### Sovellus

- 24. Oliko Scoopshot -sovellus sinulle tuttu ennen Omakaupungin kokeilua?
- 24.1. Kerrotko aiemmasta käytöstäsi tai mistä tunsit/tiedät sen?
- 24.2. Millaisia kokemuksia sinulla on sovelluksesta?
- 24.3. Miten sovellus soveltuu lukijatoimintaan?
- 24.3.1. Mitkä vahvuudet
- 24.3.2. Mitkä heikkoudet
- 25. Mitä muita ajatuksia tai ideoita sovellukseen liittyen on tullut tai tulee mieleesi?

#### Paikannus

Scoopshot pystyy tarjoamaan sinulle paikkasidonnaisia tehtäviä paikkatiedon taustaseurannan avulla.

- 26. Mitä mieltä olet siitä, että Scoopshot seuraa paikkatietojasi taustaseurannasta?
- 26.1. Oletko antanut Scoopshotin paikantaa sinut?
- 26.2. Miksi?
- 27. Oletko etsinyt tehtäviä scoopshotista paikkatiedon perusteella?
- 27.1. Kerro mitä olet tehnyt?
- 28. Mitä ajattelet siitä, että sovellukset paikantavat matkapuhelintasi?

#### Tietojen julkaisu

29. Sallitko scoopshotissa nimesi tai nimimerkkisi julkaisun ottamiesi kuvien yhteydessä?

- 29.1. Miksi?
- 30. Oletko julkaissut Scoopshottiin ostettuja kuviasi Facebookissa?
- 31. Jaatko muita ottamiasi kuvia sosiaalisessa mediassa?

## <u>Tehtävät</u>

32. Miltä Vartin/Metron jne tehtävien vastaanottaminen ja suorittaminen Scoopshotin kautta on tuntunut?

33. Mitkä asiat vaikuttavat tehtäviin vastaamiseen? (palkkiot / muu huomioiminen, tilanne, aihe, aika, paikka)

33.1. Kerrotko tarkemmin miten vaikuttaa.

### Määrä

34. Mitä mieltä olet lähetettyjen tehtävien määrästä?

## Aiheet

Annetaan luettavaksi / luetaan haastateltavalle tehtävänanto kerrallaan ja kysytään häneltä jokaisen jälkeen

- Siivoustalkoot, 1 viikko, 1 €
- Tallinnan laivaliikenne, 12 tuntia, 1 €
- Teiden kunto, 1 vuorokausi, 50 €
- 35. Teitkö tehtävän?
- 35.1. Kuvaile tehtävän tekoa.
- 35.2. Mikä sai sinut tekemään tehtävän?
- 36. Mitä muita ajatuksia, tuntemuksia tai ideoita tehtävänanto herätti?
- 37. Mitä mieltä olet tehtävän kestosta?
- 38. Entä tehtävän palkkiosta?

39. Tehtävistä saatava palkkio vaihteli 1 eurosta 50 euroon, jonka lisäksi oli mahdollista saada leffaliput tai vähintään 50 euron rahapalkkio lehdessä julkaistusta kuvasta. Mitä ajatuksia tai ideoita palkkiointi herätti?

## Scoopshot vs. SMS

40. Oletko osallistunut Vartin tekstiviestipohjaiseen (SMS) tehtäväkokeiluun 2011 – 2012?

## KYLLÄ:

41. Miten vertailisit SMS-kokeilua ja tätä Scoopshot-kokeilua?

## <u>Tehtävät vs. normaali osallistuminen</u>

42. Kumpi tapa osallistua sisällön tuotantoon on sinulle mieluisampi: tehtävät vai perinteinen osallistuminen esim. kuvia ja juttuja lähettäen?

43. Miksi?

44. Mitä ajattelet tehtävänannoista tapana osallistua verrattuna perinteiseen osallistumiseen?

45. Ajatuksia / Ideoita

## <u>Yleistä</u>

## Tehtävät

46. Minkä tyyppisiä tehtäviä sinua kiinnostaisi tehdä? (kuvaus, video, haastattelu...)

- 46.1. Miksi?
- 47. Kuinka usein olisit halukas vastaanottamaan uusia tehtäviä?
- 48. Missä olisit kiinnostunut tekemään tehtäviä?
- 49. Millaisissa tilanteissa voisit tehdä tehtäviä?
- 50. Miten paljon olisit valmis käyttämään aikaa ja vaivaa tehtävän tekoon?
- 50.1. Mistä asioista se riippuu?
- 51. Mikä sinusta olisi sopiva tehtävän voimassaoloaika?
- 52. Miten osallistumista voisi huomioida?

#### Kuvien/juttujen paikkatiedon hyödyntäminen

- 53. Mitä ajattelet paikkatiedon lisäämisestä kuviin, juttuihin tmv.
- 53.1. Mihin ja miten tietoa voitaisiin käyttää hyödyksi?
- 53.2. Olisi tiedon käyttämisestä jotain haittaa? Mitä?

#### <u>Kehitysajatukset</u>

54. Miten ajattelet, että lukijat voisivat tulevaisuudessa osallistua sisällöntuotantoon?

55. Onko sinulla ideoita tehtäviin liittyen?

Annetaan luettavaksi / luetaan haastateltavalle skenaario (liitteet) kerrallaan ja kysytään häneltä jokaisen jälkeen

- 56. Millaisia ajatuksia, tuntemuksia ja ideoita skenaario herättää?
- 57. Voisitko nähdä itsesi käyttämässä sovellusta?
- 58. Millaisissa tilanteissa näkisit itsesi toimimassa näin?
- 59. Tuleeko sinulle muita ideoita tai ajatuksia skenaarioon liittyen?
- 60. Miten tätä voitaisiin hyödyntää uutistoiminnassa?
- 61. Miltä tämä tuntuisi sinusta
- 61.1. Materiaalia tuottavana lukijana?
- 61.2. Uutisten kuluttajana?

#### Skenaario 1:

On lomapäivän aamu ja Maija haluaa lähteä pyöräilemään. Ennen lähtöään hän avaa puhelimestaan lukijareportterisovelluksen, joka näyttää tehtäviä sekä kartalla että kameran läpi katsottuna.

Hän etsii tehtäviä 10 kilometrin säteellä, sillä iltapäiväksi on tiedossa jo muita suunnitelmia. Maija katsoo puhelimensa läpi ja näkee 7 kilometrin päässä olevan haastattelutehtävän, josta on luvassa 10 euron palkkio. Hän päättää lähteä suorittamaan tehtävää ja katsoo sovelluksesta opastuksen kohteeseen.

#### Skenaario 2:

Pekka kävelee kaupungilla, kun hänen puhelimeensa saapuu viesti lukijareportterisovelluksen kautta. Viestissä lukee "Kolari Kiasman edustalla. Joko onnettomuuspaikka on saatu raivattua?"

Pekka avaa viestin ja näkee kuvan onnettomuuspaikalta. Hän on korttelin päässä paikasta, joten hän ottaa tehtävän suoritettavaksi ja päättää kävellä sitä kautta.

Paikalle saavuttuaan hän ottaa kuvan ja kirjoittaa liitteeksi viestin "Kolaroidut autot on siirretty syrjään kadulta". Hän saa viestistään vastaanottovahvistuksen ja palkkiotililleen 1,50€.

#### Skenaario 3:

Matti lukee paikallislehteä ja näkee jutun onkimisesta. Juttua varten pyydettiin edellisellä viikolla lukijankuvia ongella saaduista kaloista ja Mattikin oli lähettänyt kuvan onkimastaan suuresta ahvenesta. Lehteen ei ole valittu Matin lähettämää kuvaa.

Hän avaa lukijareportterisovelluksen puhelimestaan ja katsoo lehden kuvaa puhelimen kameran läpi. Puhelimeen aukeaa näkymä, jossa hän voi selata kaikkia tehtävään lähetettyjä kuvia. Matti löytää kuvien joukosta useita hienoja otoksia ja myös itse ottamansa kuvan.

#### Skenaario 4:

Liisa odottaa rautatieasemalla junan lähtöä. Aikaa kuluttaakseen hän avaa puhelimestaan lukijareportterisovelluksen ja alkaa sen läpi katsella ympärilleen. Hän näkee merkinnän ihan lähellään. Liisa avaa kohteen ja ilahtuu huomatessaan, että joku on kirjoittanut samassa odotusaulassa istuessaan runon. Hän lukee runon ja kirjoittaa runoilijalle kommentin. Odotusaika on päättynyt ja Liisa nousee junaan.

62. Millaista sisältöä ja kenelle sinä voisit tuottaa paikkaan liittyen?

63. Millaista yleisön tuottamaa sisältöä voisit itse paikkaan liittyen katsoa/olla kiinnostunut?

## <u>Lopuksi</u>

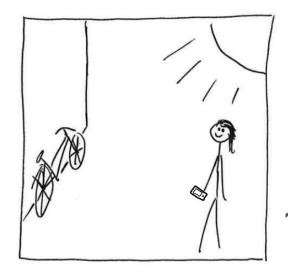
64. Tuleeko sinulle jotain muuta mieleen näihin aiheisiin liittyen?

65. Kerro vapaasti ideoita ja anna palautetta lukijoiden osallistumiseen, tehtävänantoihin, osallistumisen huomioimiseen tai muuhun kokeilun asiaan liittyen.

## **Appendix G: Scenarios**

Annetaan luettavaksi / luetaan haastateltavalle skenaario kerrallaan ja kysytään häneltä jokaisen jälkeen

- 1. Millaisia ajatuksia, tuntemuksia ja ideoita skenaario herättää?
- 2. Voisitko nähdä itsesi käyttämässä sovellusta?
- 3. Millaisissa tilanteissa näkisit itsesi toimimassa näin?
- 4. Tuleeko sinulle muita ideoita tai ajatuksia skenaarioon liittyen?
- 4.1. Miten tätä voitaisiin hyödyntää uutistoimintaan liittyen?



Hän etsii tehtäviä 10 kilometrin säteeltä, sillä iltapäiväksi on tiedossa jo muita suunnitelmia. Maija katsoo puhelimensa läpi ja näkee 7 kilometrin päässä olevan haastattelutehtävän, josta on luvassa 10 euron palkkio.

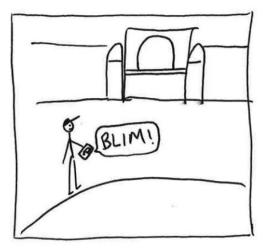
#### Skenaario 1:

On lomapäivän aamu ja Maija haluaa lähteä pyöräilemään. Ennen lähtöään hän avaa puhelimestaan lukijareportterisovelluksen, joka näyttää tehtäviä sekä kartalla että kameran läpi katsottuna.



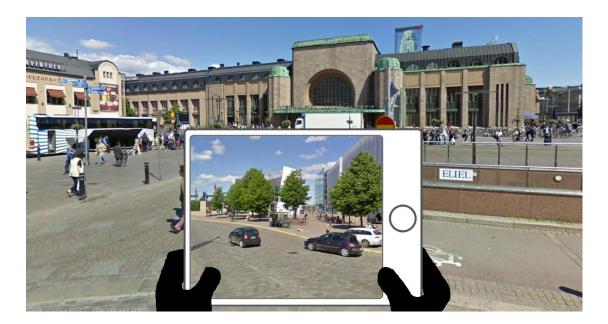
Hän päättää lähteä suorittamaan tehtävää ja katsoo sovelluksesta opastuksen kohteeseen.





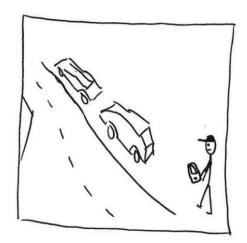
### Skenaario 2:

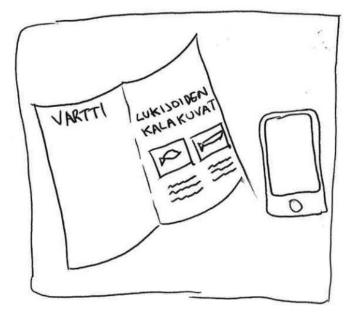
Pekka kävelee kaupungilla, kun hänen puhelimeensa saapuu viesti lukijareportterisovelluksen kautta. Viestissä lukee "Kolari Kiasman edustalla. Joko onnettomuuspaikka on saatu raivattua?"



Pekka avaa viestin ja näkee kuvan onnettomuuspaikalta. Hän on korttelin päässä paikasta, joten hän ottaa tehtävän suoritettavaksi ja päättää kävellä sitä kautta.

Paikalle saavuttuaan hän ottaa kuvan ja kirjoittaa liitteeksi viestin *"Kolaroidut autot on siirretty syrjään kadulta"*. Hän saa viestistään vastaanottovahvistuksen ja palkkiotililleen 1,50€.

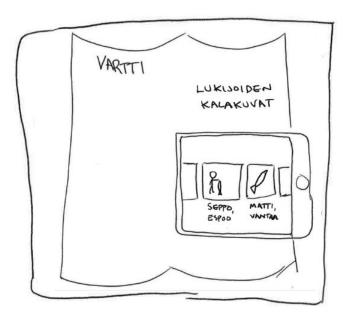




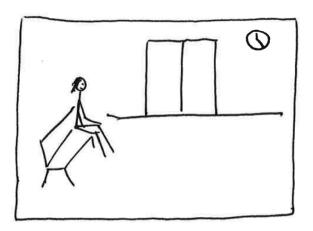
## Skenaario 3:

Matti lukee paikallislehteä ja näkee jutun onkimisesta. Juttua varten pyydettiin edellisellä viikolla lukijankuvia ongella saaduista kaloista ja Mattikin oli lähettänyt onkimastaan kuvan suuresta ahvenesta. Lehteen ole ei kuitenkaan valittu Matin lähettämää kuvaa.

Hän avaa lukijareportterisovelluksen puhelimestaan ja katsoo lehden kuvaa puhelimen kameran läpi. Puhelimeen aukeaa näkymä, jossa hän voi selata kaikkia tehtävään

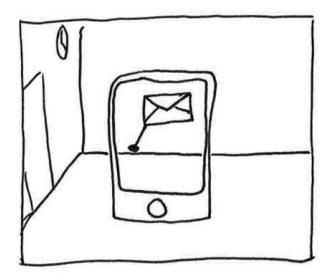


lähetettyjä kuvia. Matti löytää kuvien joukosta useita hienoja ja hauskoja otoksia sekä myös itse ottamansa kuvan.



#### Skenaario 4:

Liisa odottaa rautatieasemalla junan lähtöä. Aikaa kuluttaakseen hän avaa puhelimestaan lukijareportterisovelluksen ja alkaa sen läpi katsella ympärilleen.



Hän näkee merkinnän ihan lähellään. Liisa avaa kohteen ja ilahtuu huomatessaan, että joku on kirjoittanut samassa odotusaulassa istuessaan runon.

Hän lukee runon ja kirjoittaa runoilijalle kommentin. Odotusaika on päättynyt ja Liisa nousee junaan.

## VAIHTOEHTOISESTI:

Liisa katselee AR-lasiensa läpi ympäristöä löytääkseen itseään kiinnostavaa viihdyttävää sisältöä ja löytää siten runon.



# Appendix H: Groups of coded interview data

Group	Sub-groups				
Background					
0	Equipment	•			
	Other				
Participation	Activities	Type of participation			
•		Participation frequency and			
		duration			
		Factors affecting participation			
		Assignments vs. spontaneous			
		photographing			
		Investment			
	Material				
	Means				
	Media				
	Topics				
	Other				
Motivation	Photographing				
	Reader's material	Own interest			
		Reward			
		Other's interest and publishing			
		Influencing and causing			
		benefit			
		Other			
	Other				
Material	Own material	Own photos			
		Own videos			
		Other own material			
		Topics			
		Activities			
		Publishing and sharing			
		Location information			
	Other's material	Good photo, worth publishing			
		Good video, worth publishing			
		Good story, worth publishing			
The trial	About the trial	Expectations			
		What made one join			
		Positive			
		Negative			
	Own contribution	Why did carry out assign-			
		ments			
		Why did not carry out assign-			
		ments			
	Assignments	Topics			
		Amount			
		Validity			
		Rewarding			
	Wishes				

Assignments	t			
	Tallinn shipping			
	Road conditions			
	The best dog park			
	Noise barriers			
	Wishes for topics			
	Other			
Scoopshot	Own usage	When and how began		
		Assignments		
		Spontaneous news photos		
		Income		
		Settings		
	Evaluation	Functionality		
		Other		
	Other			
Scenarios	Scenario 1			
	Scenario 2			
	Scenario 3 Scenario 4			
Ideas, thoughts and wishes				

# Appendix I: Categorized trial descriptions

Category	Number of positive responses	Number of negative responses	Number of responses	Number of respondents
Inspiring	2	0	2	2
Inspirational	1		1	
Inspiring	1		1	
Interesting	9	0	9	9
Interesting	6		6	
Interesting	3		3	
Nice	6	0	6	5
Nice	4		4	
Pleasant	1		1	
Nice	1		1	
Innovative	8	0	8	7
Good idea	2		2	
Inventive	1		1	
Novel	2		2	
Modern	1		1	
Novelty	1		1	
Utilizing new technique	1		1	
Useful	1	1	2	2
Useless		1	1	
Possibility to influence	1		1	
Challenging	2	1	3	3
Acceptably challenging	1		1	
Difficult		1	1	
Easy	1		1	
Successful	3	2	5	5
Quite successful	1		1	
Positive	1		1	
Smaller than expected		1	1	İ.
Lazy		1	1	
Awaiting	1		1	
Contentment in tasks	2	1	3	3
Clear shooting objectives	1		1	
Wish for more tasks		1	1	
Different photo tasks	1		1	

Feedback	Separated	Related to	Positive Negative Neutral
Tehtävät eivät motivoineet	Tehtävät eivät motivoineet	Topic	Negative
juurikaan tai edes mahdollistaneet välttämättä mahdollistaneet minulle	Olin innoissani ennen tehtävien alkamista,	Trial	Positive
osuneita mahdollisuuksia. Koirapuistoista en tiedä, koska ei ole koiraa ja teiden kunnostakaan ei juuri tietoa	mutta parin tehtävän jälkeen innostus jo lopahti. Yhden kuvan onnistuin vain lähettämään.	Trial	Negative
ole koska ei ole autoa Olin innoissani ennen	Schooping tuntuu hyvältä sovellukselta ja idealta,	Scoopshot	Positive
tehtävien alkamista, mutta parin tehtävän jälkeen innostus jo lopahti. Yhden kuvan onnistuin vain lähettämään. Schooping tuntuu hyvältä sovellukselta ja idealta, mutta varsinaisia uutiskuvia en ole ikinä onnistunut sen kautta myymään	mutta varsinaisia uutiskuvia en ole ikinä onnistunut sen kautta myymään	Scoopshot	Negative
laajempia aiheita.	laajempia aiheita.	Topic	Neutral
Enemmän nuorisoa koskevia tehtäviä!! Me ollaan tulevaisuus, hei ? :P	Enemmän nuorisoa koskevia tehtäviä!!	Торіс	Negative
Tuntui järkevältä toiminnalta. Tätä lisää!	Tuntui järkevältä toiminnalta.	Trial	Positive
Olisi kiva toteuttaa pientä tunnista paikka aiheista kisaa.	tunnista paikka aiheista kisaa.	Торіс	Neutral
Palkkiot yksinkertaisesti liian pienet. Työstä pitää maksaa kunnon palkkaa. Jos ko. mediat toimisivat vapaaehtoisvoimin, olisi se asia erikseen.	Palkkiot yksinkertaisesti liian pienet.	Reward	Negative
Olisi kiva, jos tehtäviin voisi osallistua riippumatta asuinpaikasta. :) Ja myös, että	Olisi kiva, jos tehtäviin voisi osallistua riippumatta asuinpaikasta. :)	Location	Neutral
osa tehtävistä olisi vähän vaikeampia kuin toiset.	Ja myös, että osa tehtävistä olisi vähän vaikeampia kuin toiset.	Торіс	Neutral

# Appendix J: Feedback from the trial

Noin kuukausi takaperin oli	Noin kuukausi takaperin oli	Process	Negative
laitettu jokin tehtävä, jota	laitettu jokin tehtävä, jota		
korjattiin myöhemmin	korjattiin myöhemmin		
jälkikäteen tekemällä uusi	jälkikäteen tekemällä uusi		
tehtävä + että vanha tehtävä	tehtävä + että vanha tehtävä		
jätettiin vielä sulkeutumiseen	jätettiin vielä sulkeutumiseen		
asti roikkumaan listalle,	asti roikkumaan listalle,		
vastaavan välttämiseksi voisi	vastaavan välttämiseksi voisi		
panostaa. Scoopshot on vielä	panostaa.		
melko raakile, ainaskin noissa	Scoopshot on vielä melko	Scoopshot	Negative
paikkaan sidotuissa tehtävissä	raakile, ainaskin noissa		
itsellä tapahtuu usein niin että	paikkaan sidotuissa		
suorittaa jossain tehtäviä,	tehtävissä itsellä tapahtuu		
tehtävät loppuu, vaihdan	usein niin että suorittaa		
maisemaa ja sitten edellisen	jossain tehtäviä, tehtävät		
paikan ennen näkemättömiä	loppuu, vaihdan maisemaa ja		
tehtäviä alkaakin ilmestyä.	sitten edellisen paikan ennen		
	näkemättömiä tehtäviä		
	alkaakin ilmestyä.		
Lisää vaan tehtävänantoja.	Lisää vaan tehtävänantoja.	Trial	Neutral
Kokeilussa mikään aiheista ei	Kokeilussa mikään aiheista	Topic	Negative
oikein tuntunut nappaavan	ei oikein tuntunut nappaavan		
juuri tarvittavalla hetkellä	juuri tarvittavalla hetkellä		
Kuvausajan pituus toki oli	Kuvausajan pituus toki oli	Validity	Positive
hyvä.	hyvä.		
Tehtävät voisivat olla myös	harmittaa	Topic	Neutral
pientä ihmistä	pysäköinti,tupakointi,ihmisten		
koskevia,harmittaa	käytös,vaikuttaminen		
pysäköinti,tupakointi,ihmisten	havaittuihin puutteisiin,kuvaa		
käytös,vaikuttaminen	julkkis,huonoin		
havaittuihin puutteisiin,kuvaa	pysäköinti,turhat bussilinjat.		
julkkis,huonoin			
pysäköinti,turhat bussilinjat.			
Tehtävät olivat liian kaukana	Tehtävät olivat liian kaukana	Location	Negative
eikä 5 euron takia jaksa lähteä	5 euron takia jaksa lähteä	Reward	Negative
montaa minuuttia	montaa minuuttia		
kuluttamaan.	kuluttamaan.		