Everyone is a Potential Source

The link between newspapers, readers and news

VICTOR OLSSON
and
FABIAN WAHLGREN

Bachelor of Science Thesis
Stockholm, Sweden 2011
Everyone is a Potential Source

The link between newspapers, readers and news

VICTOR OLSSON
and FABIAN WAHLGREN

Bachelor's Thesis in Computer Science (15 ECTS credits)
at the School of Computer Science and Engineering
Royal Institute of Technology year 2011
Supervisor at CSC was Leif Handberg
Examiner was Daniel Pargman


Kungliga tekniska högskolan
Skolan för datavetenskap och kommunikation

KTH CSC
100 44 Stockholm

URL: www.kth.se/csc
Abstract

**Everyone is a potential source**
In the last couple of years, the general public has started to use social media more and more as means for distributing and collecting news and information. This leads to a problematic situation for an already exposed part of the graphic industry. To help solve this issue this report will investigate if there is a possibility of creating a sustainable competitive advantage by using the general public as a source of information.

In this report two crucial questions are answered:

- In regards to the creation of news content, are consumers viable sources of information?
- What is required of a newspaper to use the general public as sources of information?

By investigating the routines of the largest Swedish newspaper, Dagens Nyheter, performing interviews and sending out spreadsheets, a clear image of how the situation is today has unfolded. Most newspapers simply miss a lot of tips due to limited resources and routines. With these surveys and interviews, the questions above have been answered and a few suggestive ideas have been presented.

In conclusion, by doing minor organizational changes and by using already existing technology, the newspapers can without a doubt earn more money and make their editorial organization more efficient.
**Varje person är en potentiell informationskälla**

Under de senaste åren har allmänheten börjat använda sociala medier mer och mer som ett verktyg för att distribuera och samla ihop nyheter och information. Detta leder till en problematisk situation för en redan utsatt del av den grafiska industri, nämligen dagstidningsbranschen. För att kunna lösa detta problem kommer vi i denna rapport undersöka om det finns en möjlighet att skapa hållbara konkurrensfördelar för dagstidningarna genom att använda allmänheten som en informationskälla.

I denna rapport besvarar vi två viktiga frågor:

- Är konsumenter och läsare hållbara informationskällor? Med hänsyn till skapandet av artiklar och nyheter.
- Vad behöver en tidning eller en nyhetsbyrå göra för att kunna använda allmänheten som informationskällor?


För att sammanfatta det hela så kan dagstidningar tjäna pengar på arbetskraft och tid genom att göra mindre förändringar i sin organisation. Om man också nyttjar redan befintligt teknik, både hos läsare och internt, kan tidningar och nyhetsbyråer otvivelaktigt effektivisera sin redaktionella organisation och skapa långvariga band med tidningens trogna läsare.
# Table of Contents

1 Introduction .......................................................................................................................... 6
  1.1 Background ..................................................................................................................... 6
  1.2 Purpose ............................................................................................................................ 6
  1.3 Target group .................................................................................................................... 6
  1.4 Delimitation ..................................................................................................................... 6
  1.5 Reliability and Validity ..................................................................................................... 7

2 Research .................................................................................................................................. 8
  2.1 Editorial Organizations ..................................................................................................... 8
  2.2 Mobile Journalism .......................................................................................................... 8
  2.3 Citizen Journalism ........................................................................................................... 9
  2.4 Online newspapers .......................................................................................................... 10
    2.4.1 OhmyNews ............................................................................................................... 10
  2.5 Technology ..................................................................................................................... 11
    2.5.1 Metadata .................................................................................................................. 11
    2.5.2 Mobile connectivity ................................................................................................... 11
    2.5.3 Internet as a tool for information-gathering ................................................................. 12
  2.6 Consumer trends ............................................................................................................. 12

3 Methodology ........................................................................................................................ 14
  3.1 Interviews ........................................................................................................................ 14
    3.1.1 Purpose ...................................................................................................................... 14
    3.1.2 Target group .............................................................................................................. 14
    3.1.3 Approach .................................................................................................................... 14
    3.1.4 Strengths and Weaknesses .......................................................................................... 15
  3.2 Surveys ............................................................................................................................. 15
    3.2.1 Purpose ...................................................................................................................... 15
    3.2.2 Target group .............................................................................................................. 15
    3.2.3 Presentation ............................................................................................................... 15
    3.2.4 Approach .................................................................................................................... 15
    3.2.5 Strengths and Weaknesses .......................................................................................... 15
  3.3 Observations ...................................................................................................................... 16
    3.3.1 Purpose ...................................................................................................................... 16
1 Introduction

1.1 Background
As users of social media channels, consumers are accustomed to checking Twitter and Facebook for the latest updates on what is happening around them. The fact is that many users now a day feel that the websites of newspapers and magazines are quite slow on reporting the news. As a consumer, you want the latest information, virtually as it happens and you want it to be accurate. The combination of these statements pose an issue for most news agencies, which is why more and more people are looking towards social media and user created content for real time information. There should exist a more reliable way for the consumers to get real time updates on what is going on in the world. To be able to compete with consumer created content, news agencies must turn to consumers as sources of information. Since most news agencies receive massive amounts of tips of varying quality, we have chosen to look into the use of tips in today’s journalism.

Before starting with the surveys and investigations, we had to know what we were looking for. Therefore we chose to define the term tip as “Any information, text, image, audio, video or metadata, sent from a non-official source that could potentially be used for the creation of news updates or articles.”

1.2 Purpose
The purpose of this report is to investigate how newspapers and news agencies can improve the way they use the general public as sources of information with regards to mobile technology. To be able to do this, we will try to find answers to these specific questions:

- In regards to the creation of news content, are consumers viable sources of information?
- What is required of a newspaper to use the general public as sources of information?

By answering these questions, we will investigate if there is a possibility of creating a sustainable competitive advantage by using the general public as a source of information.

1.3 Target group
The target group of this report, and the group which has been the focus of the surveys and interviews, is mainly larger news agencies and newspapers. And, in regards to newspapers, with a main focus on the editorial organization for the online edition of the newspaper.

1.4 Delimitation
The focus of this report is the work of the editorial staff of the online edition of a newspaper. We have also made a few comparative remarks concerning news agencies such as TT or Reuters, although we have chosen to limit our studies and interviews to newspapers. We will not look into TV-news or focus on printed edition. This report focuses on online editions and social media.
1.5 Reliability and Validity
During the course of this investigation it was realized that some aspects of the method used were flawed. To start, the method the investigation was mostly based on was the interviews. The execution of these interviews differed, since one was done eye-to-eye while the other was done over email. This resulted in much lower quality and usable data in the second interview, for the purpose of the investigation. Furthermore, interviews with other newspaper agencies such as Svenska Dagbladet or Expressen, could have been done. This would possibly have given different perspectives and strengthened the ideas presented in this report.

Lastly, it is important to understand that Dagens Nyheter (the newspaper where the investigation was carried out) may not the most representative newspaper with regards to tips from the general public, but it was the newspaper that gave response to the proposed investigation. This because Dagens Nyheter is not known for working tips from the general public, compared other newspapers like Aftonbladet that focuses more on scandalous news.
2 Research

2.1 Editorial Organizations

In most news companies, there is a very strong hierarchy within the organization. First and foremost there is the editor in chief, who is ultimately responsible for all content published in the newspaper. In many smaller and mid-sized companies, the editor in chief is also the CEO of the company, as is the case with Dagens Nyheter, the largest daily newspaper in Sweden. Next in line after the editor in chief is the managing editor, the work of the managing editor is more related to the content and layout of the newspaper and he or she works closer with the reporters. The managing editor is most often responsible for the main part of the newspaper since some attachments have their own editorial staff, which is often the case with cultural or business-related content and other attachments with a very specific theme [1].

When focusing on the main part of a newspaper, and then looking on the editorial staff that works with the news there are clearly laid out tasks for everyone. There are certain people who write for the foreign element of the paper, some write sports articles and some publish general news. This means that certain information, which is sent in to the newspaper, should go directly to the person who is working with that type of articles.

2.2 Mobile Journalism

A mobile journalist, or mojo, is “A reporter armed with a mobile phone and a fast connection” [12]. In other words it is a reporter out in the field with a complete mobile toolkit for reporting different types of news, live and direct.

Often when out in the field, a reporter has an entire crew with camera, sound and a minivan with a satellite dish on top to be able to broadcast on the spot. In the case of a mojo, they have a mobile phone, a 3G-connection and perhaps a keyboard and a microphone with them. It is no longer a question of carrying heavy cameras and other equipment since a smartphone easily fits in your pocket and the rest of the equipment in a small backpack, but not even the extra equipment is really needed, it just improves the quality in some regards.

There have been many news reports during the last couple of years which have had sound, images and video, recorded on a mobile handset, as a main attractor for readers. The Virginia Tech shooting for instance, which occurred in April 2006, is an example of this. During the massacre, the student Jamal Albaughouti managed to record it all with his mobile phone. This video was later given to CNN who put it on their website for millions of viewers to see around the world. If the mobile phone manufacturers never had attempted to push the development towards more intelligent and all round devices, Jamal Albaughouti would never have been able to film the massacre.

Live streaming is used today by journalists, and has been used for quite some years now. They carry a smartphone (often an iPhone or an Android) and use regular applications such as Bambuser as a primary tool for streaming. When the stream reaches the online editor at the
office, the stream can easily be uploaded onto the website and the readers can watch live events as it happens.

2.3 Citizen Journalism

Citizen journalism is, as the expression suggests, a media-related concept in which the readers, citizens and public interact with a company or an organization to distribute news, articles or other informative content such as video or radio.

J.D. Lasica, Senior Editor of the organization Online Journalism Review, prefers to use the term *participatory journalism* instead of citizen journalism, simply because the field is too vast to be covered by the term citizen journalism. Instead, Lasica divides participatory journalism into six different categories [8].

1. **Audience participation in mainstream news outlets**
   In these forums, most content are created by professionals, working or freelancing for the news network that publishes the content. The participation comes in when readers comment on the content and discuss in the comment fields, most often located directly below the article. News about high school sport activities and such, written by readers, also fall into this category. As well as photos, video and other reports sent in by readers. Even reviews of hotels and restaurants fall into the *Audience participation* category. This is by far the broadest of the six categories.

2. **Independent news and information websites**
   These websites use both their own journalists and citizens to create their content in a collaborative way. Citizens can send in the basic information as tips, which are later edited and put together by journalists. Most of these sites have a specific theme, such as tech (Gizmodo.com) or politics (workingforchange.com).

3. **Full-fledged participatory news sites**
   Nearly all content on these sites are created solemnly by citizen-reporters. A good example of this kind of site is the previously mentioned Korean site OhmyNews, which is described as “the crown jewel” of participatory news sites.

4. **Collaborative and contributory media sites**
   Collaborative and contributory media sites use a mesh interface of Weblogs and discussion boards. Everything2, a typical case in this category, describes itself as "a very complex online community with a focus to write, publish and edit a quality database of information, art and humor. When you make an account here you join not only a team of dedicated writers but an entire micro-society and community with its own pop culture, politics, beauty and blunders."

5. **Other kinds of “thin” media**
   In this category, mailing lists and email newsletters are typical examples that are often used to reach the masses. There are however several more types.

6. **Personal broadcasting sites**
   Personal broadcasting sites are everything from web radio to a YouTube-channel or a personal site for broadcasting video.
2.4 Online newspapers
Since the early 90’s, when the internet had its breakthrough and started reaching into ordinary households, it has grown exponentially. Most of the already well-established newspapers saw early on that the internet was the way to get an advantage over other newspapers and began using it to reach more consumers faster. They also started using it as means of communicating between newspapers, news agencies and their personnel.

Since it is cheaper, easier and faster to upload news to a webpage rather than sending it to print, most newspapers quickly started to adapt to a more digital world and soon the online editions had almost as much, and in some cases more, readers as the printed edition. This lead to a shift in organizational structure since the way of working with online editions is so different from working with print. You do not have a final deadline every day when everything goes to print, but you have several smaller deadlines for every single article and news updates. There is also the possibility of editing the text in an article after it has been published. For an online newspaper it is very important to be first with the news, rather than having all the facts since the facts can be filled in later. This is why you often see a heading and a lead paragraph without the actual text when a large incident has occurred.

In the last decade or so, several news companies have emerged as newspapers with an exclusively online edition. In this way, they can focus solemnly on editorial and journalistic issues and the staff does not have to be concerned with printing presses or other deadlines regarding ordinary distribution.

2.4.1 OhmyNews
OhmyNews is an online newspaper that started in Korea in 2001 with the motto “Every Citizen is a Reporter” meaning that they publish articles and news written by the average citizen with an interest in writing and reporting the news [3]. OhmyNews has a few reporters that continuously publish articles under the name of the newspaper while other articles have the authors name. Out of all the content published on OhmyNews, as much as 80% is written by citizen journalists, the final 20% is written by hired reporters.

Since OhmyNews wants to keep a high credibility and keep its brand professional, the editors at OhmyNews go through the citizen-written articles to make sure that they are written in a good way and do not concern trivialities. This makes sure that sources for the articles are up to date, which keeps the brand reliable. Since the website started in 2001, there have been more than 10,000 different authors writing articles for the website, some have written only a single article, and some use it daily as a forum for political discussion.

To get people to write articles, the authors are paid a small amount depending on how many times the article has been read and how high rating the article gets. When reading an article, the reader can rate the article from “kindling” to “rare species” since OhmyNews have chosen to use forestry terms. But you could just as well use a 1-5 star system or such. This ensures that the authors always do their best when writing articles, otherwise they would never get paid.
According to Mr. Oh, the founder of OhmyNews, the existence of this type of newspaper was critical in the Korean presidential election held in 2002. To such a degree, that when President Roo Moo-hyun was elected, he chose to give his first interview to OhmyNews. This shows what an impact a regulated forum for publishing articles can have on the crowd. During the election in 2002, OhmyNews had about 40% of the South Korean population reading the news on a daily basis, for any newspaper, that is an incredible number, even more so for a company with just one year since startup.

For Mr. Oh, one of the goals when he expanded OhmyNews and started OhmyNews: International, was to compete with the existing larger media, especially the American ones. When investigating the trend in worldwide media, Mr. Oh found that there was a huge imbalance in political views among the media. Almost 80% of all newspapers and news agencies are drawn more to the conservative while only 20% are more liberal, Mr. Oh set it as his own personal goal to start changing that and level the playing field to almost 50-50, in which OhmyNews plays a huge roll.

### 2.5 Technology

When talking about technology in regards to mojos or citizen journalists, all that is needed is a smartphone and a fast mobile uplink. But these are only the basic requirements, if more technically advanced equipment and software is available, it will strongly increase the quality of the content with high-resolution images and video and the possibility of streaming live. Since most smartphones are concentrated to Nokia’s Symbian Devices, Apple’s iPhones and several Android handsets [5], it is much easier for the manufacturers and software developers to develop cross-platform tools. This is why many of the applications that are developed for high-end handset devices come in both an Android- and an iOS-version. In the US, there are some differences in the numbers since a large group of smartphone users prefers Blackberries.

#### 2.5.1 Metadata

Metadata is information sent with the rest of the data. It is data in a registry that describes the main parts of data and the metadata also helps to interpret the actual data [10]. Metadata does not in any way differ from regular data. It is simply digital information which is used to interpret other data, so it is the way we use metadata that defines the word and makes it different from other data. Metadata exists in many different forms and describes very different types of data, but when metadata is mentioned in this report, the focus is on the type of metadata that can be sent via a mobile application or an email. This metadata can contain GPS-coordinates, timestamps, a username, phone model and many other types of information.

#### 2.5.2 Mobile connectivity

While talking about mobility and the opportunity to use regular handset devices as a tool for publishing news, one cannot ignore the limitations, and possibilities, of the infrastructure in the country. In Sweden, we have several communication service providers (CSP) that offers a wireless connection to the internet via 3G and other similar networks. Regular 3G has a maximal download link of 2Mbit/s and an uplink of 384 kbit/s [11]. In the case of mobile journalists or citizen tips, the upload is a critical factor when sending more than text, especially if it contains a high quality video-stream. According to the streaming service
Bambuser, the absolute minimum requirement to stream a stable video link with their application is 100kbit/s, though at this level the video is highly compressed and can be fairly pixelated [2].

Most of the infrastructure in the telecommunications sector supports a so-called High-Speed Uplink Packet Access (HSUPA) and High-Speed Downlink Packet Access (HSDPA). HSDPA is commonly known as Turbo-3G in Sweden and when using both technologies, the uplink increases to 5.76 Mbit/s and the downlink to 14.4 Mbit/s. With upcoming technologies, the up- and downlinks can increase tenfold so that any person with a mobile device can stream uncompressed HD-video, which has a data rate of 25-27 Mbit/s [14].

These newer and faster technologies exist today, but are so far too expensive to be put to use in an everyday environment. However, researchers in the telecom sector are currently working on a way to make the tools cheaper and more cost-efficient so that they can be put to use in the public market.

2.5.3 Internet as a tool for information-gathering
As one might expect, the arrival of the internet proposed many new tools and ways of working and communicating between reporters, sources and offices. News gathering expert Melvin Mencher once said that “The source is the reporter’s life blood. Without access to information through the source, the reporter cannot function.” This he said in 1997, when the internet was in a chaotic state of anarchy and the structure we see today was a farfetched idea at best. None the less, the statement is true no matter how you work as a reporter, it is absolutely essential for a reporter to have good information, and good information comes from good sources. The internet is such a source, and is even more reliable than some semi-criminal informant that is often the case.

However wonderful the internet might seem from an information-gathering perspective, even something so good has its issues. And the biggest problem that journalists encounter while searching for information on the internet, is source credibility [4]. During a survey done in 1997 it is clear that people do not trust information on the internet. 54.1% listed lack of verification as a major problem, unreliable information (44.9%), badly sourced information (44.3%) and lack of site credibility (43.8%) were also major concerns for the respondents. Although these numbers are somewhat old, the problems remain nonetheless. Since this was an obvious problem, several companies have created an online service that helps whoever is using it to find trusted sources without much hassle. Even though Wikipedia is not often accepted as a source in scientific publications, it is often the first page one turns to when in need of quick and reliable information, regardless of the subject. There are many similar functions created by organizations and companies who strive for a quicker, simpler and more reliable internet.

2.6 Consumer trends
The arrival and exponential growth of the internet has naturally affected many more than just the reporters and the journalists. The consumers have started to use the internet more and
more over the last couple of years, especially with the latest arrival of Twitter, powerful smartphones and tablets. These are just some of the latest in a long line of tools and services that have popped up over the years. If we look back a decade, the first smartphones with an internet service started expanding so that the wealthier businessmen could carry his email account with him wherever he went. The need and demand of a continuous update in real time started with the outbreak of the early version of the radio in the 1920’s and started back then to become a demand from the public. It slowly continued with live reports from sporting events, and continued when the TV came in to your ordinary living room. However, the immense demand from consumers to have everything when they want it (most often in real time and personalized) has developed more over the last few years as more services have become available. Another aspect in this is that the possibility to interact and express yourself in “the cloud” for everyone to see, has become as simple as a click on the computer [13].

Since the want of “on demand” is nearly saturated with the technology and tools an ordinary citizen carries in his pocket every day, a new need have emerged; the need to express your thoughts and opinions, the need to be heard, the need to be, not just another person, but to be someone that people listen to and reflect upon. People send in more and more debate articles, they publish material on Twitter, Facebook, blogs, YouTube and they comment more and more on all content they can find on the internet [9]. One must only look at any website with some type of information flow to see a field for comments, smoothly placed below the content for everyone to use.

The internet also gives people the opportunity for anonymity. Even if you want to be heard, you might not want to use your real name, so a large portion of people who comment on content on the internet choose to do so with a pseudonym. The same is true for most types of activities in the cloud, even gaming. By doing so, the person writing the comment still gets his or her thoughts out into the open, and can discuss back and forth with others while keeping the anonymity that is so vital for some. Since it is so easy to be anonymous on the internet, many consumers write comments or thoughts that they never would say or publish in real life under their own names. This, of course, can lead to some debates being more extreme online than in real life.
3 Methodology

The method used for this research project included three different parts. The first and most important to the investigation was interviewees that had knowledge of editorials and how they handle information. The second was surveys related to information and channels of information. The last method used was filed observations of a news editorial. A more detailed description of each method can be found below.

3.1 Interviews

The paramount method used in the research is the interviews, which were used as basis too much of the work alongside the literature study preformed.

3.1.1 Purpose

The main purpose of doing interviews was to gain a better understanding of how news teams and editorial staffs work with information, from the channels used to publish of articles on a website or printed newspapers. Furthermore, the interviews were meant to give a better picture of how editorial staff work and their view on the rapidly changing news industry. It was meant that knowledge be acquired on how the editorial team gathered information from the general public, which is crucial to gain the right perspective on how the organization can and should change for the better.

3.1.2 Target group

To gain a general understanding of the process, which information goes through within the editorials of a news company, the investigation was carried out at Dagens Nyheter. High ranked personnel within the organization were held in focus.

3.1.3 Approach

The interviewees were chosen by following our target group of high ranked personnel which resulted in the editor in chief for the online edition of the newspaper (called DN.se) since he had best understanding of what all in the editorial worked on and how they worked. After first contact with the editor in chief a meet was scheduled in Dagens Nyheter’s main headquarters to discuss the investigation. During the meeting it was agreed upon a time and place for the interview. Following the meeting questions where prepared based on the literature study executed beforehand.

The interview was held at the DN headquarters with the sole intention to maintain a relaxed environment where the interviewed could feel comfortable. The interview was carried out following the prepared questions but was not restricted to them, as more of a discussion situation was preferred to get more qualitative data from the interview. The entire interview was recorded with a digital voice recorder and notes were taken so that nothing discussed or answered would be lost. Afterwards a second interviewee was needed which lead to the newest editorial team within DN called DN+, which worked with the tablet edition of the newspaper. One of the editors in charge of DN+ was contacted by email for an interview but there were time constraints from the editor’s side, which lead to emailing the interview questions to in return receive feedback also by email.
3.1.4 Strengths and Weaknesses
Interviewing the subject allowed for a more qualitative data collection to occur which lead to richer results. The fact that questions were answered orally lead to more extensive answers compared to the answers received by email. Further, the fact that the interview was held face-to-face allowed for an environment where discussions could naturally arise from the questions and answers. Moreover, the interviews allowed questions and answers to be explained rapidly if so needed.

3.2 Surveys
The surveys were used as an aid to the data collected from the interviews and literature study and were based on the data collected during our interviews. Through our first interviewee it was possible to send the survey to around 10 relevant people, which of 4 answered.

3.2.1 Purpose
The purpose of the surveys was to gain a better understanding of the amount of information that came from tips and to get an insight into what the journalists and editors found what most problematic with their current way of collecting and organizing tips. The surveys also allowed the gather of more quantitative data on the amount of tips received since the interviews showed that there was no recorded data on the amount of tips the editorial team received on a given day.

3.2.2 Target group
The target group included all the personnel of the editorial organization for the online edition of the newspaper within DN, which work with information either from official channels or non-official to produce articles. The email addresses where never released but the editor in chief guaranteed that the right personnel would receive our survey.

3.2.3 Presentation
The survey was produced using Google’s tool for creating surveys and questioners in their web based program, Google Documents. The survey started out presenting the thesis of the investigation and explaining the purpose of the survey. Furthermore, the introduction included the same definition for tip as used throughout the project. The survey questions were based on the interview so it was known that a detailed record of tip usage was non-existing which lead the survey’s answer boxes to be free text to allow our target group to answer, as they felt appropriate.

3.2.4 Approach
To reach the target group, one of the interviewees was used as contact person. Björn Hedensjö from DN.se, who was interviewed, helped by sending the survey link to all the reporters and editors within the editorial organization for the online edition of DN. This allowing to reach the target group efficiently and easily.

3.2.5 Strengths and Weaknesses
As mentioned, the survey method used was meant to allow the reach of a larger group of people within the target group but at the same time it did not allow for discussion or interaction with the target group. Furthermore, surveys allow for more quantitative data
compared to interviews while also allowing for qualitative data collection if questions so allow. The greatest weakness in using surveys in data collection is that the quality of the data collected relies greatly upon how the questions are formed and what answering possibilities are available such as multiple choice or text answer space.

3.3 Observations
To further aid the data collected from the interviews, active observations were made in the newsroom and editorial space where the editorial for DN.se worked.

3.3.1 Purpose
The purpose with the observations was to see how the editorial team worked with each other and how they moved around in the workspace. The observations were also meant to give an insight in what computer systems were used by the team and how their existing tip system worked firsthand.

3.3.2 Target group
The target group of the observations was the editorial staff for DN.se which were also included in the survey.

3.3.3 Approach
The observations were held in the editorial’s newsroom within the newspapers headquarters. The newsroom was first observed passively where the editor in chief for DN.se showed where everyone worked and how he or she worked. Then, active observation of the computer programs and systems took place alongside one of the editors (reporters) of the editorial staff. During both of these fazes of the observation notes where taken so that no interesting or important data would be lost.

3.3.4 Strengths and Weaknesses
The main strength of observation as method for data collection is that many aspects of the problem do not come to light during interviews or surveys because the target group itself does not know such aspects can be affected or changed. On the other hand observations can many times not give significant data if used as only method of research.
4 Results

4.1 Interviews

4.1.1 Björn Hedensjö

Björn Hedensjö is the editor in chief for the online edition of the newspaper DN called DN.se. As mentioned, the interview followed prepared questions but was not constrained by them, which lead to a more relaxed discussion. The interview started out with a straightforward question about their tip system. Hedensjö said that they used very traditional tip channels such as a telephone number the general public can call to, an email address people can send messages, picture or videos to, and both a short message service (SMS) and multimedia message service (MMS) specifically for tips. He also added that the newspaper had plans on creating an encrypted channel for more sensitive tip content. But other than this, there were no other plans on further developing the way they received information from the general public. Hedensjö pointed out that the difference between how newspaper agencies work with tips and information from the general public depends on the definition of “tips”. If the definition were to be expanded to include surveillance of the Internet and social media as well as the direct communication from the general public there would be large variation in practices from agency to agency.

Further on, it was discussed that there were obvious channels for pictures and text, but no easy way of sending video clips other than emailing them. When asked if this was an aspect that was lacking in their existing infrastructure Hedensjö answered, “Yes, absolutely, it is.” He mentioned that he even believes video sometimes works better than text depending on the situation. He added that with video the quality difference between professional and amateur content, does not interfere as much from the reader’s point of view. Mr. Hedensjö explained that the fact is that a 15 second amateur video clip, which is breaking news, has greater value with their online edition than to an hour long news program on a television channel. This medium, he said, works very well with their online edition but is something they are lacking very much since when they have gotten this sort of tip it has been through email and their publishing systems are not optimized for video, which makes it very difficult and complicated to work with. Hedensjö continued saying that sometimes they also receive video footage from the other official media channels but that it is something all other news agencies also have access to and that makes it much less exclusive, which is where the true value of video lays.

Moreover, when asked his position towards the idea of newspapers following the steps of newspapers like OhMyNews, which is largely based on articles and information received from the general public, Hedensjö believed it was an interesting business model for a new actor but not for them. This because, according to him, what DN.se mainly sells to their readers is their own editorials, which are thoroughly investigated and researched so that their readers can be certain that everything is true.

Later, Hedensjö was asked what he thought was more important – being first with providing breaking news or providing high quality journalism. He explained that within DN, they strive
towards being the fastest credible news source on the market. By this he meant that once information reaches them, and is factual, it would be published as fast as possible since what they sell to their readers is their reliable editorials. They always strive towards working fast with information they can guarantee is true. He describes it as being “a compromise we [the editorial] have made, we let go of the speed a little bit so we can achieve the quality requirements.” Then when asked how they reach the goal of being the fastest credible news source, he said it is a lot about “attitude and routines”. This in the sense of having the right attitude towards information that comes in, such as being critical towards the source of information and knowing what sources to rely on or not, and the right routines to follow the many channels of communication and media as well as being professional and knowing the publishing processes.

Hedensjö has then presented with the idea of having an integrated system for all the different channels from which tips arrive through and he believed that the most important in such a system is that there be a good interface with high usability where tips are well presented so that they can be worked with. Then, if such a system had good filters for the information, Hedensjö believes it would change the way the editorial staff value the tips that actually come through since at the moment they make judgment calls on every tip that comes in. The fact is that many good or valuable tips are lost because such a judgment call has been made where the information is later seen at another newspaper or news channel.

Mr. Hedensjö was then asked if it sometimes or has happened that tips from the general public have been ignored because official sources have revealed similar information which result in the loss of witness information or point of view. He said that there is a definite tendency for that to happen since when that presents itself they tend to rely on established sources and discard sources they are less certain about.

Then, it was asked how they work with nation and local news versus international news regarding how they take in information. He explains that internationally it is more about monitoring other news agencies like Reuter’s news flow and their own international correspondents, while locally and nationally they rely on agencies like TT (Tidningarnas Telegrambyrå) and tips through emails and telephone, but also from social media like Twitter.

Next, Hedensjö was asked if tips where used as basis for longer article series or if only their established information sources were used. It turns out it can be a combination of both in some cases, but since for longer series a lot of the editorials resources have to be invested, they have to be certain the information is reliable. This fact makes it very hard for the editorial to follow through with such tips. For example, Hedensjö explains, there was a case where they got a very hot tip about a foul play scenario in the government, which turned out to be true and they placed a person in charge of the story full time during a two week period. But they could only do so because the tip had come from someone they relied on and could trust. As a follow up question, Hedensjö was asked how they could know that the tip was reliable before confirming it. He explained that in those cases it is regarding individuals they have had person contact with or people that previously tipped truthfully.
Since Hedensjö mentioned that having a previous relationship with the people who tip the editorial with accurate information can help the staff rely more or less on a given tip, he was asked how he believes it is possible to create such a relationship with all the readers. He responded that it is definitely an interesting idea and is somewhat how they reasoned with their site in the sense that right now the commentary area on the website is anonymous. This has resulted in lower quality feedback from users. DN.se’s thought is to add a threshold by taking away the anonymity, in the form of demanding some sort of account such as a Google account, Facebook login, or even email verification, to increase the quality of the comments on DN.se. Further on, Hedensjö explores the idea of having a similar threshold that takes away anonymity when sending tips to the editorial. This already exists when people send an SMS or MMS, since their phone number is attached. This would have to be implemented if some sort of tip application where in place for mobile devices. This design, according to Hedensjö, would therefore result in better quality tips and more reliable information, which increase the chances of it being used.

Further, it was asked what DN.se’s competitive advantage was compared to other news agencies. Hedensjö then states that their competitive advantage is their brand (DN) and the brands strength in a larger demographical group compared to say, SvD (Svenska Dagbladet, one of their largest competitors). This meaning that they have a larger group of “loyal” readers. Additionally, they focus on truthfulness and reliability by not writing about scandals and gossip, which in its turn is what they use as a selling point for ad sales where they present it as having a better ad environment since their readers fit into a more educated demographical group.

Hedensjö was asked what the process, from source to published article, information goes through in their editorial and how much time it takes for information to do so. The amount of time it takes depends very much on what type of information it is. For example, if it is breaking news like the tsunami originated outside of Japanese in April 2011 it is a matter of minutes. Also the process the information goes depends greatly on through which channels it reached the editorial. The editorial is built so that there is a responsible person, the news editor, who makes all the decisions on whether a piece of information is going to be used or not. Hedensjö explains that first tips are received by different individuals within the editorial staff and, if satisfactory, are sent on to the news editor who makes the decision. And it is this person who also decides what the appropriate time is going to be spent on each piece of information that reaches him for example if it is going to be handled now, later or not at all. As a follow up question, he was asked if it is possible that having one single person that decides whether or not some information is usable or relevant could be a problem. Hedensjö said that it could be a big problem if an unqualified person is in such a position within the editorial, but if that is not the case, it is the only way fast decisions can be made for everything to work.

4.1.2 Nils Öhman
As previously stated, Nils Öhman is the person responsible for DN Digital, the department in the Bonnier Group who works with the tablet edition for the newspaper, called DN+. Since
Öhman was short on time, it was decided that an interview via email would be more appropriate than an actual interview face to face.

First of all, DN+ does not have an editorial staff in the same manner as the printed or online editions do. Instead they use virtually all (according to Öhman 95%) content from the printed edition and add some slideshows, interactive graphics and in some cases a clip of video. When asked what his opinion of incorporating a one-click function for tips into DN+, he simply states; “Why not?” He also agrees that there should be a more convenient way of handling tips within the editorial organization, and if such a system should be created he puts emphasis on that the functionality and simplicity of reading and handling the tips should be a priority. It must be simple to disregard a tip if it is of poor quality and it must also be simple to send it on to the right person, if it is something that should be used by another department.

When the discussion started to lean more towards DN and the content, Öhman feels that DN is a newspaper that puts the quality of the articles very high up in their priorities. In his opinion, the importance quality in the articles outweighs the importance of being the first with the news. The quality and editorship is a main selling point, both to consumers as well as advertisers.

### 4.2 Surveys

The surveys were done in a web interface with Google Docs and the respondents had very varying degree of detail in their submitted answers.

According to the surveys, the average amount of tips that are received is about ten to fifteen tips per day, and most of these are tips sent to personal addresses. Out of all the tips, 5-10% can lead to something that can be published, and about a tenth of what is published is something that potentially can be a really good story. There are almost no tips sent in via a regular telephone, most are through emails, some as MMS and several through friends and acquaintances of editorial staff.

A lot of the tips are completely irrelevant to the editorial staff, they can contain outdated information, contain information about so minor events that they are not worth mentioning or be extremely badly written so that one simply cannot use them. There is also a major issue with contact information to the sender. As a policy, newspapers keep their sources anonymous unless otherwise has been agreed. But when people send in a tip without the opportunity to follow through because the tip lacks contact information, there is not much to do but to put it aside and hope for the next tip to roll in.

The fact of the matter is that most news arrives to the newspaper in the form of a subscription from a news agency such as TT or Reuters. These end up in an email-account, a web interface or are sent as an SMS to the editorial staff. These subscriptions give the basic information for the news and it is up to the reporters at the newspaper to find additional information that could be used to enrich the content and make it unique. This is especially important for the larger news since most newspapers gets the same information from the subscriptions, at the same time.
4.3 Observations

While observing the editorial staff in their everyday work, there were a few things that caught attention. First of all there were virtually no digital communication between the reporters in the editorial staff; it was much smaller than what was first anticipated so it was a direct link to the size of the staff. It is simply easier to just turn your head and talk to your neighboring table.

What was also noticed during the observation was how widespread the work was. There was a publishing tool called Episerver, which is used by the whole Bonnier Group. To the untrained eye, Episerver simply seems to be a Wordpress for news sites, rather than for blogs. But there are several functions beneath the surface that is not a part of basic publishing tools such as Wordpress. Episerver had however no way of integrating the tips that the reporters got sent the computer. Even the information sent from news agencies such as Reuters or TT were not integrated into Episerver so the reporters had to switch windows over and over and use a copy-paste method. Furthermore there was no support for tabs within the program, which made multitasking quite difficult.

Something that also came as a surprise was that the editorial staff did not have any routines when it came to searching social networks for information regarding recent events. This is something a lot of the staff does anyways, because the way it simplifies their everyday work. A great deal of the reporters also uses the service Google Alerts and/or RSS-readers to get information sent to them if something major were to happen.
5 Discussion

5.1 Participatory journalism

Participatory journalism is one of the cornerstones when answering if consumers can be viable sources of information. As said before, it is absolutely vital to the news agencies that they use the free labor and the will of that free labor.

For this to work as intended, the consumers need to choose a “tip the newspaper”-application in their mobile instead of posting it on Twitter or Facebook. This can only be achieved if the person posting the tip gets something in return. It might just be an automated message saying “Thank you!” or it might be money received at the end of the month. The point is people want some recognition for the effort they put in, and if they get it they are more prone to make the effort a second time. However, if they do not get any recognition what so ever, it is unlikely that the same person will try to send in more tips. This type of reward-system is, among other names, called *Nintendo Psychology*¹ and the expression is used to describe what little a pat on the shoulder can do for moral and will to work. It can also be applied in these kinds of circumstances.

As previously stated, the notion of participatory journalism is extremely wide and it ranges to everything from a short SMS-tip to a privately owned TV-network. This means that participatory journalism can be used in various forms, but those who are most important in regards to our target group are the people willing to send an image of a live event as it happens. Many of these people carry smartphones in their pockets and could easily upload an image or stream video in a matter of seconds. Therefore, it is easier to get started when focusing the work on pre-existing customers of printed editions as well as the mobile and tablet editions of newspapers. These customers have already paid for the newspaper and most likely feel a certain loyalty towards it. This loyalty can be greatly increased by letting the consumers be a part of the organization. Loyal customers will spread the word and soon enough more and more customers will turn your way. This, of course, is an ideal scenario. Everyone who has been doing some marketing knows that it is not so black and white. But with the right amount and right type of marketing, it should be feasible.

5.2 Technology and applications

Earlier on, metadata was mentioned, and the enhanced quality it would bring. If a tip is sent via a mobile application as an image and some text, the metadata can give the person receiving the tip more information than the sender could ever write. It also simplifies the process in an endless amount of ways. With the right tools, the receiving end could for example get an image on a map where the image was taken, in which direction the camera was held, who took the picture and what time it was, and much more data that might not be directly helpful, but helpful none the less. As stated in the surveys, problems often occur when people do not wish, or simply forget, to give their contact information to the newspaper. Metadata can change this as the submitting parts phone number is recorded as metadata, as well as their e-mail address (Android Market or Appstore accounts) so that the sender can be contacted for follow up questions and such.
As Nils Öhman clearly stated, there is no apparent reason why the app DN+ should not contain a “tip us now”-function. But since this is a bought app with a continuous subscription and regular payments, not everyone with the potential of tipping a newspaper need to have their tablet-app. Therefore we have found that it would be highly desirable if there were to be a second app, perhaps a “TipDN”-app. This application would only have one purpose, which would be to simplify the way a consumer can send in content to the newspaper. Such an app should be able to stream live video, send image, text, audio and video and it must be quick and simple to use. This content, in its turn, goes to an editor in the online editorial staff that handles it, approves it and puts it on their website. This can of course be used for the printed edition as well, but in our opinion most of the tips that require you to send in via an application are probably those that you would want to use right away. It makes more sense if it went through the online edition first and then, perhaps, out to the printed edition.

5.2.1 Suggestions

From the data collected and the research done throughout this investigation, it is evident that what is required of a newspaper to use the general public as sources of information, is the use of a tool that allows reporters to work with different channels of information more efficiently. Since there seems to be an issue in how tips from the general public are handled, we have come up with a set of specifications for an application that should improve the efficiency and help the editorial staff to work more easily with tips, no matter how they are sent or received.

The layout and the functions for such an application are similar to what we saw in the programs and tools that the reporters and editors use on a daily basis. We want it to have a very low learning curve so the functions can easily be implementing. If the tool is simple, familiar and quick to implement, the newspaper can save both time and money, even in the startup-phase.

The software would include two main parts. The first one would be meant as a tool for filtering tips gathered from the many channels the general public can send in information to a newspaper or news agency. These channels can include all from emails, SMS, MMS, and telephone calls to information sent from platform specific applications and live streamed video. The main function with this part would therefore be to present the people who will actually work with the information with more reliable and relevant data. Then, the second part would be meant as a tool for the editors and reporters who work and write for the editorials. In this part of the software all the different channels reporters and editors use to get the news would be found. For example, they will be able to easily find all the tips that have been sent in form the general public once they have been filtered. It would also contain all other relevant news channels a reporter might use such as TT (if it is a Swedish newspaper) and Reuters. The application would also have functions that allow reporters to screen the internet for key words and allow the sites to be shown in a format similar to an email inbox. Lastly, it would allow the reporters to connect to social networks like Twitter where they can follow the flow of information sent between people in the network.
5.3 Organizational changes
The surveys did not reveal so many ways of directly solving the problem with tips that are of too poor quality to be used. But the main thought is to save the reporters time so they do not have to search through bad tips when they could have been working on something else. Therefore it has been mentioned several times that it would be a good idea to have a person working only with “intake” to be able to delete the bad tips and send on the good ones to the appropriate person. This person should have similar tasks as a receptionist or a phone operator, finding out the basics and sending it on through, thus making the whole process more effective.

Moreover, what is also required of a newspaper to use the general public as sources of information includes making few organizational changes. With this, the foremost is to hire one person who sits and receives tips all the time, so that the tip-hotline always is manned. The person’s main task should be to scan through all tips that are sent in, erase the irrelevant tips and pass on the good ones to the right reporter for follow up. In this way it is ensured that the tips are sent through immediately and that they get to the right person at once. It also leaves more time over for the editors and reporters to put a stronger focus on the more important tasks and less time on filtering the irrelevant tips.

5.4 Possibilities and issues
The possibilities and repercussions of following our suggestions go much farther than simply organizing tips and integrating different sources of information into one single application. By showing customers and people that provide tips that their voices are being heard and making headlines, the newspaper will acquire more loyal customers who will continue to contribute to the news agency. This will in its turn provide the editorial with higher quality and more reliable tips. This would definitely create a strong and sustainable competitive advantage towards its competitors, which they will not be able to beat, or overcome since the relationships will already exist. Furthermore, by making these changes the organization will be able to reach more customers who have access to the mobile technology needed to provide the news agency with nearly unlimited amounts of information. As a consequence, the editorial will have a larger pool of information to work with, which will help increase the quality of the news articles. This will in its turn attract more readers increasing the editorial revenues.
6 Conclusion

In conclusion, through the course of this investigation it has been found that incremental changes to the way news agencies and newspapers handle information from the general public can definitely be made. At the same time it is important to note that although incremental changes would increase productivity regarding the handling of information, the only way to create a truly sustainable competitive advantage is by strengthening the relationships between customers and newspaper. From the study it is evident that consumers can be viable sources of information, but such a source can only truly be explored if the right actions are taken to communicate with those same customers and if the organizations have the appropriate infrastructure to handle the flow of information costumers have the potential to provide. It is unmistakable that the evolution of mobile technology is not slowing down and that the general public will be more equipped and prepared than ever before to handle communication in the foreseeable future. This leads us to conclude that if news agencies and newspapers do not prepare and learn how to tap into the never ending source of information that the public is, they will fade in the shadow of competitors who do.
References

All online references are up to date and confirmed as of 2011-05-09 13:00.

1. What is your opinion on the current system and routine regarding tips?
2. Nowadays, most people have easy access to better technology, easily accessible in their pockets or purses. In South Korea and Singapore more and more news companies receive a large portion of their content from the general public. How do you think the Swedish market and the Swedish newspapers would refer to such a system?
3. What does the ratio between quality versus exclusivity and speed look like?
4. If an integrated system for handling tips from the general public existed, what would be its most important aspects and functions?
5. How do you work with national and local news compared to the international ones?
6. Earlier, you mentioned that a very small part of your articles origins from content generated from tips. Why is this?
7. What is your largest competitive advantage compared your competitors? What makes DN the largest Swedish daily newspaper?
8. What does the cooperation and the organization in the online editorial look like compared to the editorial for the printed edition? Is the same job done in many places at the same time?
9. Describe the process from tip to published article.
10. How do you sort out “bad” information? How do you judge if something is worth following up on?
11. What do you think about your working environment today? How has it changed in the business the last couple of years?
12. What do you think about the mojo-concept?
13. What is your opinion of the concept of participatory journalism? Is it good or bad if news are written by the consumers but analyzed by the editorial staff? Think of Wikipedia while answering this question.
attachment 2 – interview questions, nils öhman

1. what is your opinion on the current system and routine regarding tips?
2. nowadays, most people have easy access to better technology, easily accessible in their pockets or purses. in south korea and singapore more and more news companies receive a large portion of their content from the general public. how do you think the swedish market and the swedish newspapers would refer to such a system?
3. what role do you think dn+ could take in this question? would an integrated “tip us”-function be interesting?
4. what does the ratio between quality versus exclusivity and speed look like?
5. if an integrated system for handling tips from the general public existed, what would be its most important aspects and functions?
6. how do you work with national and local news compared to the international ones?
7. what does the cooperation and the organization in the online editorial look like compared to the editorial for the printed edition? is the same job done in many places at the same time?
8. describe the process from tip to published article.
9. how do you sort out “bad” information? how do you judge if something is worth following up on?
10. what do you think about your working environment today? how has it changed in the business the last couple of years?
11. what is your opinion of the concept of participatory journalism? is it good or bad if news are written by the consumers but analyzed by the editorial staff? think of wikipedia while answering this question.
<table>
<thead>
<tr>
<th>Question</th>
<th>Response 1</th>
<th>Response 2</th>
<th>Response 3</th>
<th>Response 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hur många tips om dagen får du in?</td>
<td>pressmed? 30?</td>
<td>15</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Hur stor andel av dessa används till något alls?</td>
<td>som kunskap ganska många</td>
<td>20 procent</td>
<td>0-1</td>
<td>0,25</td>
</tr>
<tr>
<td>Hur stor andel kommer in via telefon?</td>
<td>0</td>
<td>20 procent</td>
<td>20 procent</td>
<td>0,1</td>
</tr>
<tr>
<td>Hur stor andel kommer in via mail?</td>
<td>det mesta</td>
<td>78 procent</td>
<td>80 procent</td>
<td>0,5</td>
</tr>
<tr>
<td>Hur stor andel kommer in via MMS?</td>
<td>o</td>
<td>2 procent</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hur stor andel av alla tips innehåller ytterligare information som kan användas i praktiken?</td>
<td>en del</td>
<td>Kanske 10 procent</td>
<td>10 procent.</td>
<td>0,2</td>
</tr>
<tr>
<td>Sociala medier vs tips.</td>
<td>har inte tid med sånt</td>
<td>Mycket mer bra information kommer från sociala medier. Om 5 procent av våra uppdateringar kommer från tips från allmänheten, kanske 10-20 procent kommer från sociala medier.</td>
<td>Svårt att säga. Under stora händelser följer vi alltid Twitter och Facebook parallellt med övriga kanaler.</td>
<td>0,4</td>
</tr>
<tr>
<td>Hur stor andel av dessa blir något väldigt bra?</td>
<td>1</td>
<td>5 procent, kanske lite mer</td>
<td>0-1</td>
<td>0,05</td>
</tr>
<tr>
<td>Vad kan göras bättre?</td>
<td>Mer personal...</td>
<td>En redaktion kan ha en person som arbetar endast med sk, &quot;intake&quot;. Det är en resursfråga, hur mycket tid det finns för redaktörer att gå igenom tipsen, hur mycket tid reportrarna har och hur allmänheten lägger</td>
<td>Att utse en person som man kan skicka också mera komplicerade tips till och som har som uppgift att undersöka dem.</td>
<td>Tydlig rubricering.</td>
</tr>
</tbody>
</table>
fram sina tips.

Många är rakt av dåliga, vissa är röligt skrivna, folk uppger inte tillräckligt med information och många vill inte uppge sina kontaktuppgifter. Det är ett problem.