THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE


COLLEGE OF INFORMATION SCIENCES AND TECHNOLOGY
AND DEPARTMENT OF JOURNALISM


THE IMPACT OF TECHNOLOGY ON PHOTOJOURNALISM
A PROTOTYPE FOR RETHINKING JOURNALISM


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Fall 2009


A thesis
submitted in partial
fulfillment of the requirements
for baccalaureate degrees
in Information Sciences and Technology and Management
with interdisciplinary honors in
Information Sciences and Technology and Journalism


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# Abstract

How can traditional media change to embrace an evolving readership and provide a news product that readers find useful and media corporations can make profitable?  Newspapers are facing tough times because of the internet news revolution - news is available instantly, anywhere, and for free.  It's a no-brainer for consumers to get their news online.  It no longer makes sense to wait a whole day to see the news, and even less sense to pay for it.

At the same time as readers going online for their news, they have also become capable of creating their own reporting; and at times doing a better job of it than trained professionals.  This revolution has emerged from the ubiquity of camera and smart phones.  In essence, every person with a camera phone (which is most everyone) is a reporter.  The difference is that these reporters no longer have to be dispatched to the scene when something happens.  They are already there and capable of capturing and uploading content before a traditional reporter has time to get there.

Through this thesis, I will explore this question of how traditional media can change to embrace new technologies and the concept of citizen media interactions.  Although I will focus on newspapers because they are in the most trouble, these concepts can be applied to all forms of media to increase readership and become a more active member of the local community.

As a result of the research I conduct, I will create a prototype to demonstrate many of these concepts.  The prototype is a multi-device platform that focuses on community involvement with news media.  There will be a web interface and a fully featured mobile phone interface to allow photo, video, audio, and text contributions, discussions, and collaboration.

An online version of the prototype and thesis can be found at maxwellkruger.com/thesis09

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# Introduction

How can traditional media change to embrace an evolving readership and provide a news product that readers find useful and media corporations can make profitable?  This is a question that everyone in the newspaper industry is scrambling to answer before they are forced to close down as their circulation drops and advertising revenue plummets  (Jarvis).  Newspapers are facing tough times because of the internet news revolution - news is available instantly, anywhere, and for free.  It's a no-brainer for consumers to get their news online.  It no longer makes sense to wait a whole day to see the news, and even less sense to pay for it.  That's what the up and coming generation of news consumers are thinking (Edmonds).

At the same time as readers going online for their news, they have also become capable of creating their own reporting; and at times doing a better job of it than trained professionals.  This revolution has emerged from the ubiquity of camera and smart phones.  In essence, every person with a camera phone (which is most everyone) is a reporter.  The difference is that these reporters no longer have to be dispatched to the scene when something happens.  They are already there.  And for the most part, many are well trained in capturing photos or video and transmitting them to the masses.  Look at the Hudson River plane crash in January 2009.  One of the first photos of the event that ultimately ran on the front page of many newspapers nationwide came from a citizen reporter.  Janis Krums, who was on a ferry diverted to pick up flight passengers, snapped the photo on his iPhone from the window of the ferry, uploaded the image to popular social networking site, Twitter, and instantly shared it with the world.  Shira Ovide, a media reporter at the *Wall Street Journal* writes, "Social media tools like Twitter -–which allows users to tap out 140-character status updates — have changed how breaking news events are recorded and covered.  They made for on-the-ground reports from the Mumbai terror attacks in November, for example."  Through this thesis, I will explore this question of how traditional media can change to embrace new technologies and the concept of citizen media interactions.  Although I will

focus on newspapers because they are in the most trouble, these concepts can be applied to all forms of media to increase readership and become a more active member of the local community.

## Research Methods

This project consisted of three major phases.  I began with a requirements gathering phase, moved to a literature review, and then a prototype development phase.

During the requirements gathering phase, I interviewed over ten industry experts about the current state of journalism and explored problems and potential fixes.  These interviews were focused on readers and their interactions with the media.  I looked at how readers view traditional media and analyzed the decrease in traditional readership.  In addition, I looked at how different news companies are attempting to fix these issues.   I conducted phone interviews with newspaper and television reporters and editors.  I focused on news outlets that had previous experience with citizen journalism and spent much of the interviews discussing previous successes and failures.  I spent a wonderful day at Gannett headquarters in Virginia talking with various experts on their digital team looking at the problems and solutions from multiple viewpoints.  From this, I gained an in-depth, first hand understanding of the challenges the news industry is facing and got insight on how different outlets are trying to innovate.

Throughout the interview process, I also used published readings to further analyze the current state of journalism.  These readings primarily focused on documents published online due to the constantly evolving nature of the topic.  I started with popular media sites and blogs such as Poynter, Nieman Lab, Jeff Jarvis Buzz Machine, J-lab, and OJR and branched out from there.

Once I gathered enough data, I began the development of a prototype application that news organizations can use to increase readership and allow for increased user interaction.  The application focused on community engagement and provided a hub for discussion and news contribution.  It allows

users to interact with one another via chats and comments and asks them to participate in newsgathering. This includes, but is not limited to, uploading photos, video, audio, and text, participating in "research" on news topics, and contributing opinions and blog entries. This concept focuses on increasing readership by giving readers an interest and direct connection to the media provider.

## Problems with the Current System

There are several problems with the current interaction between media outlets and its users and readers. These problems include three micro problems; inconsistent quantity and quality of reader submissions, and ineffective compensation schemes for submissions and two macro problems; lack of user engagement in media and the niche problem with news and advertising.

Inconsistency in both the quantity and quality is one of the major issues plaguing the usability of reader submissions. Obviously, the quality of user submissions will never consistently match that of professionals and this is expected and accepted when taking submissions from readers. However, the problem arises when it becomes difficult to control for the wide range of quality. In almost every conversation that I had about citizen contributions, the first issue to come up was the variety of quality in submissions. Jonathan Weber, founder of online news source New West (newwest.net), discussed how quality was a major issue in accepting and using reader-generated content. He stated one issue was "if you allow open contribution, what people tend to do is unload their whole disk full of pictures of the same thing and you get a lot of quantity but not necessarily a lot of quality. "(Weber) It is a very difficult and time-consuming process to filter through submissions to select those at a reasonable level of quality for publishing. Some submit professional-level work while others submit unusable or simply irrelevant content (Weber). Traditionally, companies have chosen to either allow all content or filter it.

Both options have their downsides; letting all content through reduces the quality of the publication, while filtering the content costs time, effort, and speed to publication.

Additionally, quantity of submitted content is highly variable. If publications are going to depend on reader submitted content, it must be reliable and worth publishing. Since there are few successful compensation schemes, users usually contribute irregularly and when it's convenient. They have no direct tie to the publications; nor do they have a pre-defined incentive to contribute. This means that publications have a difficult time relying on this type of content; further stunting success. Steve Outing, a consultant in online media, discusses the problem of quantity in reader submissions. "But will [citizens] really contribute, or will they just yawn at the opportunity to write for free? If you're reactive rather than proactive, then the latter will be the case" (How to Integrate). He suggests that readers require constant encouragement to participate, citing experience from Northwest Voice (bakersfieldvoice.com), a citizen-journalism site (Outing, How to Integrate).

Compensation and incentive structures have not yet been effectively established. Some publications are trying revenue sharing models. Steve Buttry, former editor of the *Cedar Rapids Gazette* who now leads the Complete Community Connection initiative for Gazette Communications discussed with me some possibilities for rewarding users for content. His ideas are focused around sharing revenue generated from content, rather than rewarding anyone who contributes. For example, he says, "If your pictures get some traffic and we sell some advertising on your blog, then you get a little trickle of money from that. Or if this picture's really good and we use it on the front page of the Gazette, then you get a bigger check for that. You decide to go to shoot a high school basketball game that we're not covering, and shoot some pretty nice pictures there and one of the kids on the team or parents discovers it and sends an email to all the other parents and they order prints of their kids playing basketball, that you get some money for that." Other papers, like the *Fort Myers News-Press*, have experimented with holding contests to incentivize readers to contribute. However, these efforts have

been met with mixed success and few are scalable and reliable, often because the rewards are not great enough to encourage continual contribution. Creating an incentive structure is necessary to increase both quality and quantity of submissions. Some additional reading on new business models can be found on chuckpeters.iowa.com, stevebuttry.wordpress.com, and buzzmachine.com.

In addition to these technical problems, two larger, more complex, and more general problems exist within the news industry that must first be addressed before citizen journalism becomes commonplace - lack of reader investment and the niche problem. According to Michael Langley, current assistant news director for multimedia at an ABC affiliate in Sacramento and a 15-year journalist in TV, online, radio, and newspaper in Sacramento, Washington DC, and San Francisco, one of the most important and oft-forgotten aspects of journalism is a strong reader investment in local journalism. The *Fort Myers News-Press* has done an excellent job engaging its readers and allowing them to take a stake and play a part in the reporting. In 2006, the paper solicited help from readers to investigate a shady sewer project in the Cape Coral community. The community suspected there was something going on when it cost individuals up to $45,000 to connect to the sewers. The Fort Myers News-Press asked its readers to help investigate the hundreds of pages of documentation. "Retired engineers analyzed blueprints [and] accountants examined balance sheets"(Howe, Crowdsourcing). "Not only did the paper unearth government malfeasance ... but for six weeks the story generated more traffic to the News-Press website than it had ever received for any event other than a hurricane" (Howe, Crowdsourcing). By engaging the readers, they were able to generate huge interest in the paper in addition to solving a government scandal.

Readers have to care. Journalists are the ones who pay attention to local government meetings and have a responsibility to serve people, because most people don't have the time to do so themselves. Without reporting, governments and corporations will be able to take advantage of the public because no one will be watching. Over the past decade or so, traditional media has slowly dug itself into a ditch

by reducing its appeal and readership.  Doing things like including TV show tie-ins and other gimmicks has reduced its integrity.  Pankaj Paul, manager of Content Development at Gannett Digital, argues that slimming down content that readers pay for, like comics, puzzles, and coupons, has reduced those willing to pay for a newspaper (Paul).  These problems stem from recent trends and are compounded by hardships resulting from reduced income, which in return further damage their ability to include what readers want, according to Jeff Jarvis, a media consultant and associate professor and director at the City University of New York's Graduate School of Journalism (Jarvis).  Without user involvement and concern about local media, it will be difficult to promote citizen journalism.

The niche problem of news advertising describes a problem created by the Internet with the advent of detailed user activity tracking.  By having incredibly in-depth user activity logs, companies are able to deliver extremely customized content to users to appeal exactly to their tastes.  This has resulted in thousands, if not millions, of minute niches that traditional media has a problem overcoming with its general, mass content approach.  Pankaj Paul says that "the sum of the niches is much more important than the mass," meaning that you can no longer generalize the approach to reporting (Paul).  This has resounding effects on both news content and advertising.  Readers can find information about any topic they are interested in from any perspective that they want online.   This makes a traditional mass media approach less appealing to readers because they no longer have to accept generalized content because they can find exactly what they want to read online.

Additionally, advertising has become more effective online because advertisers can analyze and learn specific users' interests and target very tight niches.  Advertisements can be targeted to individuals instead of generalized for mass populations reading newspapers or watching TV.  This makes advertising more cost-effective because instead of wasting money by advertising irrelevant ads to the mass, ads can be sent directly to the intended consumers.  This reduces the amount of money advertisers have to spend to be effective, which also reduces income for those who display advertisements.  It also reduces

the value of advertising in general audience print publications, further hurting the traditional media industry.  Paul discussed a social media study done at Arizona State University which identified that Black and Latino users were much less likely to use Facebook and more likely to use MySpace than other parts of the population.  If the population is able to be cut up into tiny segments, news organizations must be able to find ways to appeal to them in different ways because they cannot afford to lose this large and important part of the population (Paul).  This effect, compounded with reduced print readership, shows the strong decline in traditional media.

## Requirements Analysis

News organizations need a news product that can connect readers to them in a way that the readers want to be connected.  This means the product must get readers involved, interest them, and take advantage of their unique skillsets.  For the product to provide value to the paper, it must directly connect the user to its organization.  This means that it must have an easy to use interface, which is widely accessible on many different platforms.  Users need the ability to connect to it whenever and wherever they are.  This is the only way that the platform will see success; it must have basic to complex ways to both consume and submit content.  For example, it must accept content from computer submissions (via email, a dedicated website, and integration with other platforms like Facebook).  Additionally, it must be extremely easy to connect via mobile devices since readers witnessing the news are most often on-the-go and news rarely occurs when sitting in front of the computer.  From basic to complex, it must accept text messages, phone calls (to record reports), mobile e-mails, and there must exist dedicated clients and Web pages for mobile platforms such as the iPhone, Blackberries, Android devices, and other smartphones.  Accessibility is key to creating a lot of rich content and users who are interested in participating.

Secondly, the system has to do more than be a receptacle for content – it has to be interactive with both journalists and other readers.  Traditionally, media has been a one way interaction: newspapers and media sources reported on what they thought readers were interested in but there was little communication the other way, from the reader to the media.  Mackenzie Warren, Director of Digital Content at Gannett Digital, agrees that traditional media sources need to change to catch up to the interactivity of the Internet.  He thinks that news should be a two-way conversation between themselves and their readers.  He discussed how news sources must make a change in the mindsets of readers to increase the interactivity and communication (Warren).  While the Internet has revolutionized the way humans communicate, traditional news has by-and-large neglected these new forms of communication, causing readers to look for new outlets to gather and collaborate with their news.  Michael Langley also agrees that news sources must be a conduit for users to ask questions they want answered (i.e. to politicians, government officials).  He thinks that we must re-train readers so that they are used to interaction with media and over time media interaction and participation will be the status-quo (Langley).  It is a big undertaking to make a successful interactive product that does more than accept and display content.  It needs to get users involved so that they are interacting with one another; commenting on and rating content and having rich discussions.  By increasing involvement, usage will increase – and the more it's used, the better the content will become.

The platform must interest readers.  It has to not only be attractive, but also have attractive content.  This means focusing on straight news that is important to them and staying away from gimmicky non-news content like TV show tie-ins.  Langley suggests that readers get used to the brand that we give them and since media companies have strayed away from straight news reporting, they are less valuable to readers now.  He says that back in the 1980's, when the TV reporting motto was "Live, Local, and Late-Breaking," and news outlets focused on investigative reporting, they would get more respect and attention.  It must also allow users to ask important questions they want reporters or other

readers to solve.  This will make it easier for readers to get what they specifically want from the news

and spike their interest in the news product that has this feature.

Lastly, a key feature central to the concept of reader involvement is to take advantage of

readers' unique skill sets.  Aside from the value of having (reader) journalists everywhere with cameras

and phones to cover all events instantly, the other true value of readers is their diverse skills.  Unlike

reporters, who are trained only in reporting, readers are trained in thousands of disciplines that can add

value to the news.  An excellent case study in using reader skills is the *Fort-Myers News-Press*.  The

paper has a long history of engaging readers and over time has trained them to be active participants in

reporting.  The Cape Coral sewer project discussed earlier, which uncovered huge government fraud,

shows how powerful reader contributions can be (Howe, Crowdsourcing).  By crowdsourcing, the News-

Press is able to be more effective and generate user interest.  With their long history of user

contributions, they were able to create Team Watchdog, "which calls upon an extensive resource in our

community — retired professionals with a cache of expertise. A group of volunteer citizens living in

Southwest Florida serve as consultants, research data, work side-by-side with the professional reporting

staff and interact with readers" (Team Watchdog).  They can leverage the individual strengths and

extensive training and skills of readers to add valuable investigative power to supplement and enrich the

reporting done by traditional newsroom generalists.

## Prototype

Based on the above requirements, I have developed specifications and a prototype for a new

news platform.  The platform is an ultimate version of what could be created but would be implemented

in stages, based on development costs.  The basics remain the same: a multi-platform service for socially

contributing and consuming content.  As development occurs, the depth of various features and

functionality would vary depending on cost to implement.  For example, rather than creating a full

application for mobile devices, the platform will be accessible via a mobile web browser.  Many design

decisions like this will be made to reduce barriers to entry but allow the platform to retain functionality

and allow for success.  The platform described here will be the full version with little consideration for

costs.

Any system will be successful if it contains two key functions.  First, it has to be interactive,

allowing users to contribute, rate, comment on and discuss content.  Secondly, it has to allow editors

and reporters to moderate, promote, and focus on certain content to keep it relevant and interesting to

retain readers.  With these two things, the platform has the potential to be used heavily.

## Web Interface

The Web interface will be the central version of the platform.  It will be the most feature-

complete and should be the first to create and implement.  Only after the web platform is created, can

the other versions be created.

Below is the landing page to the web interface that users would first see when they accessed

the site.



The lead story, "Fall Comes Early", as selected by editors based off popularity and ratings, would

be the dominant element on the page.  Editors would make efforts to always choose an appealing photo

to go along with the most popular story.  Clicking on the photo or the links placed on top of it would

take readers to the story where they would find related stories and contributions by other readers,

including videos and photo galleries.

Under the lead story are two boxes, "Top Contributed Content" and "Crowdsourcing Initiatives."

Top Contributed Content would be the current stories that have had the greatest popularity and

rankings.  Crowdsourcing Initiatives would be the most popular community efforts that readers are

participating in.  I will go into more depth about these initiatives later.  There are also help and

contribute your own content links throughout all pages of the site.  Some of the top contributors are displayed to the right to highlight some users and encourage contribution.

Every page will display a live feed, which can be seen on the top right of the page.  The live feed is a combination of the various inputs that are dynamically generated and constantly updated.  It takes RSS feeds from websites, Flickr feeds, Facebook and Twitter statuses, and anything else that can be pulled from the social web.  It will be compiled from a list of inputs generated by community members and editors that are relevant to the community.

In addition to accepting content manually uploaded by users, the site will be given multiple data feeds to constantly provide relevant content.  These will be Twitter, Facebook, RSS, etc, feeds that will constantly spill data into the site.  This content can be displayed in stories, photo galleries and the live feed.  Journalists and users will be able to moderate this data; rate, comment, and discuss, with the journalists having more weight than regular users.  Content that is higher rated or commented on will both hold higher relevance ratings and be more prevalent on the website.

Manual uploads will also be accepted.  The platform will strive to accept as many different media forms as possible.  It will have the ability to accept text reports, documents (i.e. pdf, Word, Excel), audio, still photos, and video.  Of these different media, it will accept as many different formats of each as it can, such as accepting jpegs, gifs, and pngs for still photos.  The original files for all submitted content will be maintained indefinitely in case of the need for reproduction or higher resolution printing or broadcast.

## Mobile Application Specifics

There will be multiple applications created for various smartphones including iPhones, Blackberries, and Palm phones.  The app will provide a simplified interface for both viewing and interacting with content.  The idea is to merge a traditional news reader with a social networking application, like mobile Facebook.  For the purposes of simplicity, I will be using the iPhone to demonstrate the mobile application.  In addition to having a dedicated mobile application for smartphones, the platform will also accept text and multimedia messages containing photos, video, or audio.  This will make it more accessible to a greater range of users.

The app will also be able to capture and upload media.  These will be audio, video, and text.  All content will be timestamped and geotagged (if the device is capable) to verify its integrity.  Content captured elsewhere on the device and imported into the app will not share the same integrity ratings and thus be weighed lower than verified data from within the app.

In the below photo, news content is displayed in a spatial format, using the geotagged content. Geo-spatial data is very critical to the site for two reasons; it increases integrity and interest.  Users like seeing data plotted on maps and it's very interesting and newsworthy to see where a photo or video

was taken, which will draw more use of the content.  Having the data with spatial tags also increases the integrity of the data because it can be shown exactly where the content was created.
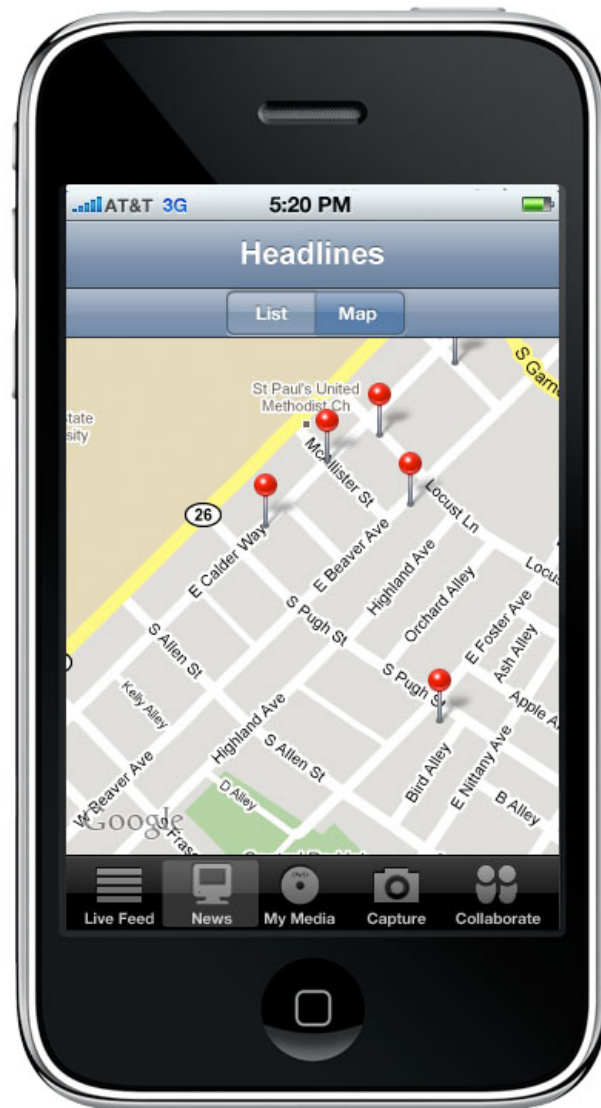


Another important aspect of the mobile application is to make it fun and useful beyond news reporting.  Users will be able to share others' content via a multitude of services from within the application  (i.e. Twitter, Facebook, flickr).  In addition to sharing others' content, they will also have the ability to edit content.  It will contain an image editor to make basic tonal changes, sharpening, cropping and rotating of images.  Video and audio will be able to be trimmed and perfected with basic editing features.  They will be able to submit this content online to both the news site and any other media

sharing site like Flickr, YouTube, and Twitter.  This capability will be integrated within the app and will

allow the user to enter their login credentials to each of the supported services and upload the content

directly from within the app.
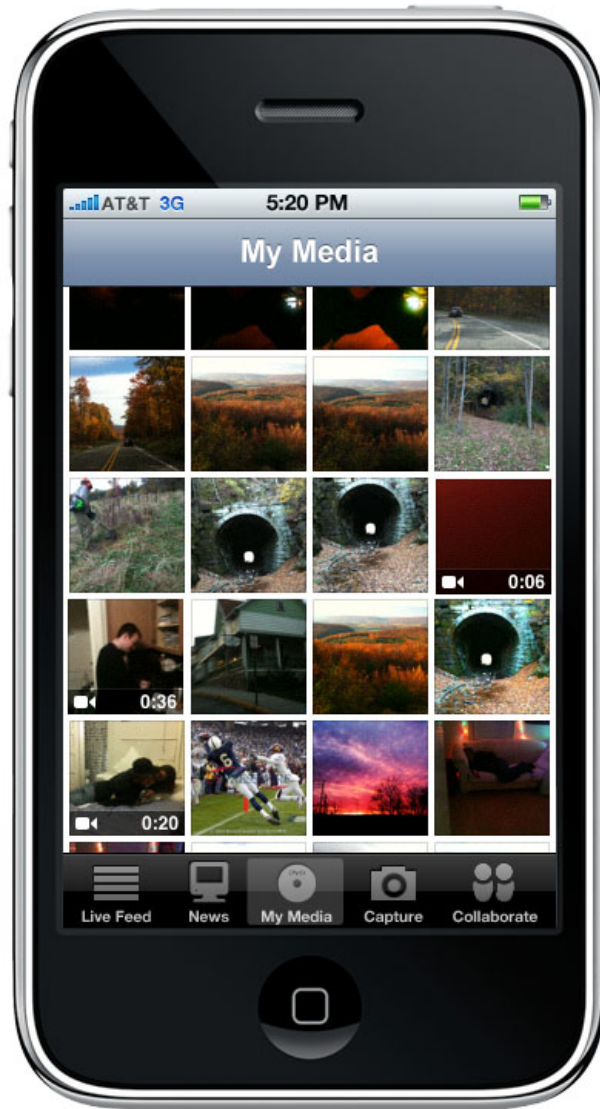
By giving users an app for which there is a use that extends beyond just news reporting, it will

both train them and make them more likely to contribute content. When the time comes that there is a

news event that they need to capture and share, they will know how to use the app and will think about

using it. Secondly, if they use the app more often, they are more likely to contribute everyday media

that they capture with it. Again, this increases the association of the app in their head and they will be

more likely to use it.

## User Accounts

When a user contributes content for the first time, they will be not be asked to register.  This is to reduce the barrier entry of using the site.  However, once the content is uploaded, they will then be asked to register so that they can edit the content and so that it will receive a higher rating automatically.  This will encourage users to create accounts and help improve the integrity of the rating system by devaluing anonymous submissions.  Below is the registration page.  Most of the information is not required to further reduce any barriers to registration.



Users will be able to become "verified users."  This will make it so that their content will be more trusted than unverified users.  They will need to enter a more complete set of information about themselves.  It will also require verification by cell phone.  A text message will be sent to their cell phone with a unique code that they will have to enter into the website.

By having this assurance, the system will have some verified contact information about a person.  It is also the hope that this will create a better user base as their content will be more trustworthy and higher quality if users go to the effort to verify their account.  Their content will be weighted more heavily and more easily rise to the top.  There will also be benefits for verified users.  They will get star indicators next to their name and they will be in the running for awards and contests.  These incentives will encourage users to verify their account and contribute more content.  Verified users will also be useful in times that reporters want to follow-up with them about a story because the news outlet will have their contact information.

Below is a page with a story written by a user.  To the right, you can see the discussion that readers are having about the subject.  The stars next to some names demonstrate the distinction between verified and unverified users.  By clicking on the icon next to Discussion, users can get a popup with the full discussion to more easily chat with one another.  All contributions will get a simple rating process, via a thumbs-up that users can give.  The thumbs-up icon will always be close to the title of the contribution; in the case to the right.  It will be grayed out if a user has not clicked on it and will turn solid when they give a contribution a thumbs-up.  If they like the contribution, they can simply give it a thumbs-up.  By keeping the rating system simple and catchy, it will be more heavily used than an unnecessary overly-complex star rating system.

Below is another page displaying a user contribution.  In this case, a user took photos at a local soccer game and posted them online for parents to see.  On the right, under the discussion section, other readers are talking about the game.  The discussion will be sorted by most recent comment and the full conversation can always be viewed by clicking on the pop-out icon.



## Content Topics

For every event or news subject, there will be a topic created to organize all associated contributions.  Below is what a page would look like that organized all contributions of one topic.  Contributions are organized by editors behind-the-scenes positionings and by number of views and ratings.  All different types of media are gathered together, such as photo galleries, video, stories, and imported RSS feed items.  Editors can have over-ruling power anywhere on the site.  They can promote

and demote contributions, organize them into topics and select what is displayed.  Topics will get

promoted based on the overall aggregate popularity and activity of the contributions within itself.

Clicking on a users' name anywhere on the site will load a page similar to this except that it will display

all of the content from a particular user.



## Collaborate

The key aspect of the platform is that it allows for continuous discussion and collaboration

between community members through which value can be created that extends beyond what a

traditional newspaper or TV station can create through traditional reporting.  One important aspect of

this is the collaborate section of the platform.  This is where users can get together and create initiatives

which they all can contribute to in order to create resources for the community.  This harnesses the concept of crowdsourcing.

The Extraordinaries is a mobile phone application that does this very thing by enabling users to accomplish "missions" such as tagging art from museums or recording the locations of potholes.  "The Extraordinaries is a micro-volunteering platform, that allows organizations to engage their supporters via micro-actions, done on-demand and on-the-spot using a mobile phone or web browser " (The Extraordinaries).  The concept can be applied to local communities facilitated by the newspapers.  Gary Kebbel of the Knight Foundation says, "We think smart phone apps for quick charitable acts are a great way to bring people together around a common purpose and also to improve aspects of life in that community" (qtd. in Will Microvolunteering Work).

Any user can create an initiative, such as creating a geotagged and photographical database of community playgrounds or a database of questions that community members want reporters to ask campaigning politicians or an analysis of government documents, like in the Fort Myers sewers case. This creates a two-way interaction between the community and the newspaper. Readers are able to both give and get back value.

Collaborate features will be available on both the web and mobile platforms.  On the next page you can see what a typical initiative would look like for a local playground database.

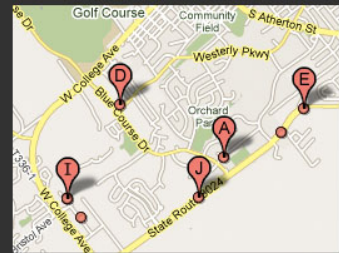When a user clicks on "Add Your Own" a popup appears in which they can add their own.  This

functionality is also available directly from within the mobile application and will allow for instantaneous

capturing of a geotagged photo without having to upload much more information.

Below are two initiatives, viewed through the mobile platform. The same functionality will be available on both the web and mobile platform and users will be able to both contribute and to view initiatives. Additionally features will be available on the mobile platform to take advantage of the wealth of sensors available on mobile devices. Photos, video, and audio can be captured as well as geolocations from GPS. For example, when adding a playground below, a user will have to do nothing but take a photo of the playground with the phone's built-in camera and it will automatically be uploaded with a location and street address. The user can choose to enter additional information such as a description later, either on the phone or through the web interface.

# Conclusions and Future

We are at the beginning of a new age of communication and collaboration. Every day, new tools enter the market that improve the way that information travels. These tools can, have, and will continue to mold the direction of journalism, facilitating faster, more personalized, and richer reporting. The Internet news revolution is not a bad thing – it is something that should be embraced and harnessed to take full advantages of advancements and facilitate the spread of news.

I have created a sample news product that demonstrates how a news corporation can begin to get involved with its readers. It focuses on community, collaboration, multimedia, and integration with already-used social technologies. Users are able to contribute content, discuss content, news events, and issues with one another, and collaborate on initiatives, all to create a better community.

Obviously, this is only the first of many steps that need to be taken to move traditional media in the right direction. Users need to be re-trained in the consumption and (now) contribution of news, revenue schemes need to be developed and tested, and technologies must grow. However, this thesis provides a basic starting point for news companies who want to learn the desires and consumption trends of their readers. Beginning with a platform as general and flexible as the one suggested will allow outlets to figure out what works and what doesn't and begin to train users in being of a part of the news.

Over the next few months, more newspapers will close and consolidate as others struggle to figure out how to survive. Broadcast television news is beginning to face similar challenges from online on-demand video. The solution is connecting with the readers. Like any good business, newspapers must provide a product that their consumers want in order to stay alive and profit. New technologies have increased the ability and ease to communicate and readers want to take advantage of that, as evident by the popularity of social networking sites such as Facebook and Twitter. By holding a closer relationship with readers, papers will not only be able to succeed, but improve the community.

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Work Experience
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May 2007 - August 2009
Computer Sciences Corporation, Baltimore, MD

May 2004 - August 2006
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Awards:
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Grants:
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