BRIDGING THE ELECTRONIC GAP:

USE OF THE INTERNET BY COMMUNITY NEWSPAPERS
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by

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The undersigned, appointed by the Dean of the Graduate School, have examined the

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BRIDGING THE ELECTRONIC GAP:
USE OF THE INTERNET BY COMMUNITY NEWSPAPERS

presented by Nicole Lebsack,

a candidate for the degree of Master of Arts,

and hereby certify that, in their opinion, it is worthy of acceptance.

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Professor Clyde Bentley

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Professor Jeanne Abbott

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Professor Jake Sherlock

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Professor Kenneth Pigg

DEDICATION

This work is for my parents, for believing in my abilities and potential before I ever gave them reason to. They share in my success.

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BRIDGING THE ELECTRONIC GAP:

USE OF THE INTERNET BY COMMUNITY NEWSPAPERS

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ABSTRACT

As increasing technology adds new avenues to the field of journalism, it is important to consider the ways journalism can be enhanced by adopting such technologies. Journalism is a field where the adoption of new technologies is becoming an expected, rather than merely beneficial, way of life, and the multitude of new technologies means there are many ways publications can adopt expertise and tools to better their products. This study compares the amounts and types of content presented in eight newspapers' print and online editions.

This study conducted a quantitative content analysis of eight newspapers over a course of four weeks. The findings show that there are significant differences between the print and online editions in certain content types and topics, but there are also a comparable number of non-significant differences. Overall, this research found few overarching trends or patterns in the amount or type of content offered, and the researcher finds that further research must be conducted.

Chapter 1
Introduction

The decline of the newspaper industry has weighed heavily on the journalism profession in recent years. Layoffs and closures have plagued even some highly respected publications, but community newspapers (defined by Garrison in 2001 as publications with circulations below 50,000) seem to have survived the downturn in the economy and the journalistic plunge with little or no impact. Chyi and Sylvie (2007) asserted that their survival and success is most likely because smaller newspapers focus primarily on local news and tend to be the only sources for news in the community(s) they cover.

Although the newspaper industry has recently seen a multitude of changes, most community newspapers have had consistent and profitable business. Strategies larger newspapers have adopted (e.g. pay walls, more content online, and interactivity) to counteract the decline in newspaper readership are fairly commonly known, but tactics of smaller newspapers have not been as heavily studied. There is no one reason that can explain the success of most community newspapers in the face of an economic downturn and decreased readership. Is it because local newspapers naturally hold a monopoly on community news? Is it because hometown newspapers represent a tradition in their communities and therefore are supported even when their level of technological sophistication falls well below their larger counterparts? No matter the reason, research suggests this is a phenomenon that will remain consistent and is therefore an area that should be studied and examined by researchers.

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Having worked for a small newspaper (the *News Letter Journal* in Newcastle, Wyo., circulation 2,150), I saw firsthand the increasingly important role the Internet plays in smaller publications. Personal experience has shown me a multitude of strategies newspapers are undertaking to deal with the onslaught of preference for online technologies. My former employers have begun using their website as a self-promotional tool and a platform to sell photos taken by staff photographers. The editor and publishers of the *News Letter Journal* struggled for years before deciding to take the plunge into the Internet, and it still took several months and more resources than they expected to execute the project.

Knowing the struggle it took to build up that side of the business, I developed an interest in the strategies of other similarly sized publications to address the increased opportunities and problems initiated by technology and how those actions have affected their businesses (e.g. profitability, readership numbers, increased staff, etc.).

In order to understand the differences between large and small newspaper operations, resource allocation theory will be briefly discussed. This idea that resources are distributed based on earning potential directly relates to how newspapers target various groups with the capital they do have. In addition, social construction of technology theory and its connection to adoption of technology will be reviewed.

Journalism schools have been teaching courses in online journalism and multimedia for several years now, and it is becoming increasingly clear that publications need to embrace some form of Web presence if they want to survive in the future. McCleneghan (2005) described the importance of reaching out to the upcoming generation, nicknamed Generation Y. This group has grown up with technology and

expects it to be present in every facet of life, and McCleneghan argues that journalism

must make the jump to a more user-friendly and technological interface if it hopes to

survive. There have been many attempts to undertake this task, but the effectiveness of

various strategies appears to be tied to the audiences they are aimed to serve. Chyi and

Sylvie's (2007) research found that the strong support of community newspapers is not

restricted to the print publication; online readership of hyperlocal news is also holding

strong.

     This quantitative study therefore seeks to investigate small newspapers around the

United States and analyze their Internet use. It will examine the connection between

community newspapers, their adaptation of Internet resources to disseminate information

to their readers, and willingness of readers to accept the change. By studying themes of

interactivity and willingness of both journalists and readers to adapt to these changes, this

study seeks to determine steps small publications are undertaking to ensure they can

continue to maintain strong readership.

Chapter 2
Literature Review

In preparing for research into this area, a review of relevant literature was conducted. Two theories are particularly pertinent to the study of adoption and acceptance of online newspapers – social construction of technology theory and resource allocation theory.

Social Construction of Technology Theory

Social construction of technology was originally conceptualized by Pinch and Bijker in 1987. This theory is described as the developmental processes of technology as a product of choice and dissimilarity; that is, users of a particular technology sift through a multitude of technologies that promise a particular set of facilities and, through trial and testing, choose the ones they prefer. Pinch and Bijker described this process as resulting in a "multi-directional model" (one that has the potential to move in different directions depending on the preferences of each consumer), which contrasts with the linear model of past studies.

Four related elements comprise this theory. First is interpretive flexibility, which suggests that technology design is a fluid process with outcomes that change depending on the social circumstances of development. The second element, that of the relevant social group, describes the tendency of multiple groups to influence and negotiate over the technology's eventual design. Closure and stabilization make up the third component, describing the points at which groups agree on final aspects of the technology. Finally, the theory considers what the researchers describe as "the wider

context." This aspect encompasses the wider sociocultural and political phenomena in which technological development occurs (Pinch and Bijker, 1987).

A few years later, Bijker (1995) added one more major concept to the theory – the technological frame. This frame refers to the shared cognitive perspective that distinguishes a group from its counterparts within society. This final idea of a frame can include characteristics like problem-solving strategies, goals, problems, and rules of behavior (Kuhnian, 1970; Bijker, 1995).

Trevino, Lengel, and Daft (1987) argued that users of technology create rich new meanings of communication through their choices of media. Similar to McLuhan (1964), they concluded that the medium is the message. Different media and forms of disseminating information contain symbolism, and the media users choose to interact with represent these symbols (Fulk, 1993). Contractor and Eisenberg (1990) noted that use of media and communication structure shape each other within their interaction in a cyclical form.

Weick (1990) stated that communication technologies "are both a cause and consequence of structure." The creation of structure is a continuous process that shapes the meanings of artifacts, and structuration itself is shaped by those meanings. Poole and DeSanctis (2001) argued that users constitute and assign meanings to technologies, and until a technology is applied to a certain context or given a meaning by a user, it is simply "dead matter."

Wajcman (2002) explained the social scientific belief that the content and direction of technological innovation are accountable to sociological investigation and scrutiny. Technological change is shaped by the social circumstances which surround it,

she argued, and this negates the theory that technology is created through a process of rational imperatives; that is, that one technology will triumph over another simply because it is "the best." User preferences are socially shaped and levels of importance are assigned to various aspects of innovation through seemingly random processes. Technologies are not fixed at the gestational stage; they evolve and develop through consumer use and preference. In this way, she argued, technology is patterned by the conditions of its use and innovation and is therefore a socio-technical product (Wajcman, 2002).

Poole and DeSanctis (1990) argued in a theoretical statement that most effects-oriented research on communication technology considers technology independent of the users and ignores the context in which it is used. Thus, much research tends to overlook or ignore integral and important aspects of technology. Their remedy to this oversight is what they call their "theory of adaptive structuration," which considers group structure (of readers) as both an effect and an outcome of the groups' interaction with technology. Groups select particular features of a technology to use, and each aspect chosen influences the group. Conversely, group norms, rules, interactions, and behaviors influence which technological aspects are chosen and used. Thus, Poole and DeSanctis argue, the relationship of technology and structure is a duality; each must be studied with consideration of how the other influences it.

Similarly, Orlikowski (1992) developed a structurational model that has two main points: technology is an effect and an outcome of human action, and group norms and properties influence and are influenced by interaction with technology. Contractor and

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Eisenberg (1990) asserted similar opinions and posited that there is a recursive relationship between communication technology and social groups.

Resource Allocation Theory

Adoption of emerging technology depends on a number of factors: an understanding of technology, how it can be applied to suit one's purposes, the capital to obtain the technology, and the equipment to run it. Carroll (1985) expounded on an idea known as resource allocation theory, which combines audience-targeting strategies with the business side of journalism and concluded that resources must be distributed among projects with the highest chances of bringing in more money.

Also referred to as "resource-partitioning" theory, resource allocation theory attempts to explain the connection of market concentration and specialist organization proliferation (Carroll, 1985). The theory presumes that the goal of large organizations is to increase demand for their services, and in order to do this, they target specific areas of consumers with the most resources. Within these areas, they seek precise groups and attempt to provide services that appeal to the groups in question.

This increased market concentration fosters competition among providers of general content, and therefore it opens up a wide area for specialist providers. And because there are so many areas where specialists can focus, there is room for a wider variety and larger number of providers. Each specialty provider aims for a target niche, and thus there can be a larger number of providers without a corresponding increase in competition. This phenomenon of a decrease in general providers and an increase in specialty providers was called by the authors "generalist consolidation and specialist proliferation" (Boone, Carrol, & van Witteloostuijn, 2002). Within the specialty

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providers, the authors found, the most resources are applied to groups with the highest economic standing and respectively poorer populations are neglected.

Boone, et. al.'s research focused on the Dutch newspaper industry, but the results are general enough to be applied to any case comparing smaller and larger markets. The main purpose of small and large newspapers differs; large and/or national newspapers publish more general national and international news, while small and/or regional papers target specific local news coverage. When applying the newspaper market to the resource-partitioning theory, we can say that larger newspapers are generalists and the smaller newspapers are specialists (Boone, Carrol, & van Witteloostuijn, 2002). Though large newspapers theoretically have the resources to hire more specialist writers, their target readership is so broad that they have to keep news general enough to appeal to a large population.

Resource allocation theory can be observed when examining newspapers and their online offerings. Mitchell and Rosenstiel described the cycle as follows: circulation and/or advertising pressures lead to revenue drops, so organizations cut costs. These cuts lead to a decline in quality, which alienates readers, which leads to further cuts. Their research suggests that declines in quality of a publication negatively affect circulation. The authors cited a Poynter Institute study that suggested the following areas to invest in: training, enterprise and investigation, community connectedness, innovation and initiative, research and development, and staff retention and recruiting (Mitchell & Rosenstiel, 2004). Ultimately, the researchers determine that making news content more diverse is the number one thing management can do to increase revenue. This will make the publication relate to more groups and thus will increase circulation.

Application of Theory

Social construction of technology theory is especially relevant to this thesis because it deals with the advancement and use of technology as demanded by the society in which it is being used. Allocation of resources theory is applicable because while societal demand for technology is a big reason behind its implementation, business practices must be considered and one especially important aspect of this aspect is the way businesses choose to allot their resources. When dealing with small newspapers that may not have many resources at their disposal and small and/or poor communities that have relatively low median incomes, consideration of resources and their distribution is extremely important.

Newspapers and the Internet

The nickname given to our youngest generation (born between 1982 and 2002) is Generation Y. This group has no concept of life before cell phones or the Internet, and almost unconsciously incorporates technology into every aspect of life. In a 2005 study, McCleneghan described the group as seeking interactivity not only in their everyday lives but also in their news sources. Journalists are looking ahead long-term by targeting this audience; they know that while today's largest group of newspaper readers is made up of baby boomers who prefer a physical newspaper, in a few short decades Generation Y will replace them as the largest group of adults (McCleneghan, 2005).

In order to reach this new generation, many newspapers around the country have been attempting to incorporate Internet applications. Researcher Jones (2002) and his family, together forming an ownership group of small rural Tennessee newspapers, used their existing resources to expand into the Internet market – strong relationships with

readers and advertisers, a trusted reputation and the cross-promotion of their Internet services in the printed edition of their newspaper (Jones, 2002).

Gilbert (2002) cited Teresa Hanafin, the editor of Boston.com, as stating that many Boston Globe employees initially viewed the online news site as a direct competitor, which fostered resentment in both newsrooms. While they both provide traditional content like news and advertisements, Boston.com employees are constantly on the lookout for creative ways to provide the information. The two news sources began as completely separate organizations, but over time they have become closer and are seen less as competition and more as collaborators due to their increased cooperation and the realization that they can work together to provide information while still maintaining separate identities (Gilbert, 2002).

This article was written before Internet news really took off, but at the time of this study 54 percent of newspapers editors saw the Internet as a potential threat to their publications (Gilbert, 2002). The study also mentions something many news organizations are just starting to realize – the importance of making the online and print publications separate and unique products. In more intertwined publications, Gilbert stated, not only was readership weaker, but innovation at either publication was lower (Gilbert, 2002).

One common complaint about the Internet, however, is that the overabundance of information, links and extraneous details may prove distracting (Dunwoody & Eveland, 2001). Online news readers have to possess a certain amount of self-determination in order to fight past the distractions so they can find the articles they were looking for in the first place.

The linear structure and finite space in printed newspapers allows readers to page through all content, essentially guiding them through the entirety of the form. This contact, however brief, increases the chance that readers may see an article they would not normally have been interested in and would not have been self-motivated to search for it on the Internet (Schoenbach, de Waal, & Lauf, 2005).

In contrast, online news content is typically presented non-linearly. Readers must open page after page, clicking on links and navigating the website, in order to find an article they desire. This extra work is added to the smaller size of a computer screen, and the combination of these two limitations almost entirely negates the possibility of a chance encounter with a news article (Althaus & Tewksbury, 2002).

However, the news sites that attract the most viewers are not affiliated with newspapers. The top four online news sources in December 2008 were MSNBC, Yahoo News, CNN and AOL News, while the *New York Times* made the list at number five (Goldsborough, 2008). In order to compete with such news networks, it appears that newspapers must adopt a more Web-focused model.

Technology Acceptance Model

Technology is always evolving, but certain tools are adopted by the masses. Technology acceptance model, proposed by researcher F. D. Davis in 1989, aims to explain the reasons why users seek out and use technology. Based on the theory of reasoned action, it involves two main predictors – the perceived ease of use and the perceived usefulness (He and King, 2006). Perceived ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort," relating to both physical and mental efforts extended and the ease of learning.

Perceived usefulness, on the other hand, refers to "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989). Enhancement of job performance could refer to effectiveness, productivity, saving time, importance to one's job, etc. Based on the model, the higher the expected ease of use and usefulness, the more likely a person is to utilize any given technology.

A study by Lu et al. (2003) suggested that several factors have a positive effect on perceived usefulness and ease of use, including technological complexity, social influences and trust of the technological environment. Liang et al. (2003) performed a similar study and found that efficacy and personal innovativeness also contributed to individual technology use.

In addition, Mokhtarian and Saloman (1997) suggested that a user's job characteristics can affect how people perceive usefulness and ease of use. For example, a user whose job requires daily use of technology is more likely to repeat such behaviors in his/her personal life. Mobility is also a factor – a user with a job that requires primary activities to be performed outside their building of employment (e.g. checking e-mails on a Blackberry or travelling for in-person meetings with clients) is more likely to adopt advanced technology outside of work.

Other factors, suggested by Junglas and Watson (2003), are perceived ubiquity and reachability. Perceived ubiquity refers to the an individual's expectation about consistency and personalization of connection between the user and his/her technology, and perceived reachability explains the degree to which the user feels he/she can "reach" and communicate with others within their network.

Sarker and Wells' (2003) research suggested that the most appealing aspect of mobile wireless technology is the "anytime, anywhere" aspect of communicating and sharing resources. Echoing this research were Dholakia et al. (2004), who found user appeal in "geographic flexibility," the freedom of physical limitations on accessibility. Looney et al. (2004) backed up this research with the suggestion that the ability to access information at any time from virtually any location appeals to those users seeking flexibility and convenience.

Online vs. Print Publications

In a 2001 study of six online newspaper websites, Dibean and Garrison (2001) concluded that the most prominent technology used at each site (i.e. the component most utilized by readers) was consumer services, including options like contact information and customer service. This term seems to encompass most interactive features, but focuses mainly on the functionality of searchable archives. The least used components were formats that required software downloads (e.g. Java or Flash), which were difficult to use, prone to malfunction and added a tedious step to the process of gathering news online.

Dibean and Garrison (1999) raised the point that success or failure of a newspaper website has been whether the websites are considered to be a part of the print edition or a separate competitive medium. The two opposing viewpoints can affect the content provided, the resources allocated, and the importance assigned to each medium, they argued. Online news is rapidly evolving, and the researchers distinguished the medium by assigning high levels of importance to frequent changes, radical redesigns, and media convergence.

Dibean and Garrison emphasized that the online version of a publication should receive as much attention and resources as the print version; publishers and webmasters should focus on breaking local news and site design, and should avoid simply transferring traditional print design principles to the Internet.

Lemke (2003) described how audiences interact with news stories on different time scales. Online news stories can be scanned in just a few seconds, and information from headlines and news bursts can obtained with a single glance. In contrast, audiences interact with stories in an average print edition of the newspaper for at least a few minutes.

Kress and Van Leeuwen (1998) described print newspaper layout in terms three main organizational functions. First, framing involves using a combination of visual elements including borders, white space, colors, text, images, shapes, and vectors to connect or separate details on a page. Second, salience involves assigning a hierarchy via visual elements like size, color, contrast, balance, and references to cultural figures or events. The vertical nature of a Web page lends an additional way to indicate salience – proximity to the top of the page, whether it be the headline, the section header, or the newspaper logo. Finally, the element of information value involves the positioning of content in a way that gives readers insight into the content's importance. Similarly to the element of salience, closer proximity to the top of the Web page indicates more information value (Kress and Van Leeuwen, 1998).

John Knox (2007) analyzed multiple online newspaper homepages in terms of the various visual and verbal elements that connote meaning to readers. In his research, he explains a few more differences between print and online editions. While traditional

print newspapers are published daily or weekly, online publications can be updated continuously, adding a degree of timeliness that increases the disconnect between the two media. An online news website (and even individual news stories) are fluid and dynamic, he argued, presenting an opposing design to the fixed format of traditional newspapers. The possibility of linking to outside sources and supplemental readings creates an expectation from the audience (Lemke 2003). In addition to the plethora of text extras made possible by hyperlinking, newspaper websites also have the advantage of enhancing their stories with audio, visual and multimedia elements. If the option exists, why not take advantage of it?

Knox (2007) also describes the website homepage as a function to orient readers to the newspaper. This entry point provides links and navigational information and establishes authority for the publication. Design and hierarchy provides guidance as to the value of content (both visual and verbal), and builds familiarity by exhibiting communality and continuity among readers and writers. Section pages, as defined by Knox, are the pages, often headed by tabs in a main navigation bar, that separate content into genres (e.g. local news, international news, sports, etc.). Story pages are the Web pages where the actual news content can be found; links to story pages appear on section pages and often the home page.

Newsbites, short blurbs with a headline and a link to the full story, resemble traditional news briefs but have a few fundamental differences (Knox, 2007). The purpose of a newsbite is to highlight the stories the publication has deemed most important at any given time. They present the main point of a story "with immediacy and

impact," provide a way for the publication to value stories visually, and attempt to attract readers to story pages to read the remaining details.

Daily newspapers

Goldsborough (2008) outlined the financial impact the Internet had on some major U.S. dailies. During the third quarter of 2008, he said, the *New York Times* earned less than half than during the same quarter just a year earlier. The *Los Angeles Times* laid off a total of 225 staff in the summer and early fall of 2008, and the *Christian Science Monitor* vowed to undertake a web-first approach and scale publication back from daily to weekly distribution. (Goldsborough, 2008).

Quint (2001) conducted a content analysis comparing newspaper names with their corresponding website URL names, and he found that publications that modified or entirely changed their name when creating a URL had greater circulation than those that kept the same title.

Words frequently dropped included "sentinel," "chronicle," "evening," "tribune," "review," and "daily," while words commonly kept included "News," "star," "leader," "sun," and "post." The author concluded that descriptors like "evening" and "daily" did not adequately reflect the Internet's 24/7 functionality, but "news" was still accurate and "sun" and "star" projected a space-age image that would appeal to readers (Quint, 2001).

Weekly newspapers

There are more than 5,000 total newspapers online (Newspaper Association of America, 2006). In the United States in May 2006, approximately half of the 7,000 community newspapers had an online version of their publication. Of those without an online publication, two-thirds said they planned to incorporate one into their business

model and one-third planned to launch a site within the next year and a half (National

Newspaper Association, 2006).

Between March and September of 2006, major U.S. daily circulation fell by

almost 3 percent, while NNA records showed that readership of community weeklies and

dailies has nearly tripled in the past four decades (National Newspaper Association,

2006).

One study examining newspaper adaptation to the Internet age found that weekly

newspapers adopted the Internet in a "relatively haphazard fashion" (Adams, 2008).

Most newspapers interviewed did not have a business plan for the website, instead

staying with the old model for the printed newspaper.

Geography and the News Divide

Knowledge and power gaps in society are ever-important areas for research, as

knowledge is increasingly necessary for power and success (Tichenor, Donohue, &

Olien, 1970). A primary approach to discussing information technology is its potential to

change knowledge and power gaps in society. As with the Internet, there is also potential

to add to or diminish inequities between urban and rural communities (Hudson & Parker,

1990). Despite the potential to decrease these gaps by making knowledge more readily

available, there also exists the possibility of widening the gaps due to the potentially

prohibitive costs of equipment required to run technology (such as computers and

Internet service) (Ettema, 1984).

DuBick (1978) asserted that the size and complexity of a news organization is

closely related to that of the community it serves. Griswold (1991) found that content

diversity and reporter specialization were also related to the structure (i.e. indicators and presence of social power) found in the community.

People who live in rural communities face economic disadvantages and limited access to information, which could hinder their adoption of information technologies (Hindman, Ernst, & Richardson, 2001). These issues range from lower income and lower levels of importance placed on education to difficulties in getting immediate and/or diverse information (Hudson & Parker, 1990).

Rural communities are also often the last to get up-to-date information technology infrastructure such as fiber optic cables and access to high-speed Internet (Dillman et. al. 1989). However, it has been projected that newspapers in rural communities could benefit from an online presence as people move away and may become willing to pay for a subscription to hometown news (Hindman, Ernst, & Richardson, 2001). This research was based on diffusion in technology in the early 2000s, but technology changes so rapidly we must keep in mind that findings and speculations have likely changed in the last decade.

Chyi & Sylvie (1998) asserted that the capacity of the Internet to serve a widely varied audience in multiple geographic areas is beneficial, but special attention must be paid to this very different long-distance market. They clarified four sub-markets within the long-distance market: (a) the local information market, (b) the local advertising market, (c) the long-distance information market, and (d) the long-distance advertising market (Chyi & Sylvie, 1998).

The local market is where people primarily read the readily available print edition of the newspaper. Online readership within this local market is influenced by the

similarity (or otherwise) of the online and print products, as well as interests and preferences of readers (Chyi & Sylvie, 1998).

The key difference between print and online products, Chyi and Sylvie argued, is that once something is published online, it is instantaneously available worldwide. This massive reach means that cost per user drops dramatically. In addition, "shovelware" (the result of "shoveling" content directly from the print edition to an online format) is not an issue with online publications because it is unlikely readers will have seen the print product (Chyi & Sylvie, 1998).

Chyi and Sylvie found that the local market outweighs the long-distance audience as seen through reader usage and targeting by newspapers. The local nature of the news, which can be found only in a very limited number of areas, will naturally appeal to those living within the circulation area, which explains why both sources (print and online) appeal to the local market (Chyi & Sylvie, 2007).

The online newspaper is technically a global medium, but there are still boundaries. When determining geographic markets, Chyi and Sylvie suggest that online providers need to consider available resources, size of the estimated audience, and the economic implications involved (Chyi & Sylvie, 2007).

Most online newspapers are currently working in two markets – the information market for readers, and the advertising market for advertisers (Chyi & Sylvie, 2007). In the past, market boundaries were often determined by geographic limits – physical constraints on a consumer's access to goods resulted in market-defined readership, but the Internet's ability to transcend geography makes this less common (Chyi & Sylvie, 2007).

Rosse (1975) developed a model of print newspaper competition christened the "umbrella" model. It describes competition among four newspapers within the same city – a metropolitan daily, a satellite city daily, a suburban daily, and a weekly newspaper. Umbrellas of varying sizes depict the reach of each newspaper, and clearly show dimensions of market boundaries including market size and relative position in the larger geographic market. However, this model is difficult to apply to online newspaper circulation because the Internet, in theory, has no such geographic boundaries (Chyi & Sylvie, 2007). Characteristics that distinguish online newspapers' local markets from their long-distance markets include consideration of both local and long-distance information markets and advertising markets.

The results of the Chyi and Sylvie study indicated that there is less of a difference between online and print circulation than researchers may have thought. Online penetration is still stronger in the local market. Researchers concluded that this must be due to the local angle newspapers took in news coverage and local residents' interest in that coverage (Chyi & Sylvie, 2007).

Chapter 3
Research Methodology and Design

Research question and background

The following research question will be investigated in this study:

RQ1: How does content compare between print and online versions of community newspapers?
   a. Does the amount of staff- and non-staff produced content vary?
   b. Does the content type differ?
   c. Do entry topics significantly vary?

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Resource allocation theory can be seen at work when examining newspapers and

their online offerings. The theory presumes that the goal of large organizations is to

increase demand for their services, and in order to do this, they target specific areas of

consumers with the most resources. Within these areas, they seek precise groups and

attempt to provide services that appeal to the groups in question.

Methodology

McCombs and Winter (1981) supported the idea that topics and geography both influence reader interest in news content. They concluded that readers' definitions of "local" news are equally influenced by type of content as well as location.

In order to answer the research question of how content compares between print and online versions of community newspapers, this study will use a quantitative content analysis. Hoffman (2006) contended that content analyses on the Internet have previously focused most on *how* messages are presented, rather than *what* messages are presented. Although content analyses cannot determine effects, she argued, it is important to study content before researching effects.

Design

In order to answer the research question, a between-samples content analysis will be performed that compares the elements (e.g. stories, videos, etc.) appearing in online and print versions of community newspapers. In addition, an analysis of answers given by editors or webmasters about structural and operational details of their publications will be performed.

Garrison (2001) described the division of newspapers into small and large – small newspapers have circulations below 50,000, and large newspapers have circulations over 50,000. Eight small community newspapers around the country will be chosen for this study; the variables for the research are circulation size (under 23,000 and 23,000-50,000) and frequency of publication (daily and non-daily).

Using content analysis

Content analysis, as described by Holsti (1968), is any technique that allows

researchers to make inferences through the systematic and objective identification of

previously selected characteristics. He specified that there are three characteristics that

define content analysis: objectivity, generality, and system (Holsti, 1968). The research

will follow Marsh and White's (2006) list of 10 steps for carrying out a content analysis:

1. Establish a hypothesis or hypotheses.
2. Identify appropriate data to study.
3. Determine a sampling method and sampling unit.
4. Draw the sample.
5. Establish the data collection unit and unit of analysis.
6. Establish a coding scheme to test the hypothesis.
7. Code the data.
8. Check for reliability of coding and adjust the coding process if necessary.
9. Analyze the coded data, using an appropriate and previously identified statistical test(s).
10. Write up the results (Marsh and White, 2006).

One of the first details to determine is the unit that will be analyzed. Holsti

(1968) describes the typical units of analysis: a single word or symbol; a theme; a person;

a grammatical unit (i.e. paragraph or sentence); or an entire item. Dividing research into

categories, or separate compartments, is another critical part of content analysis.

Categories must represent the elements of the theory being researched, must be

exhaustive (ensuring that all items can be classified in some way), and must be mutually

exclusive; that is, each item must only fit within one category (Holsti, 1968).

Procedure

The units of data collection will be the newspapers and websites, and the unit of

analysis will be elements presented in the newspaper (including articles, photos, etc.) and

on the website (e.g. stories, videos, slideshows, etc.). Within each entry, regardless of its type, the researcher will count the number of different elements contained and input the data into a spreadsheet with the following information: headline, date published, circulation size, author (staff or non-staff), elements contained (story, photo, video, slideshow, graphic, interactive graphic, embedded links, related media, and user comments), entry category (breaking news, politics/government, crime, health/science, sports, education, lifestyle/feature, arts/entertainment, faith, business, obituary, community/local, and editorial) and number of each, and characteristics of the website in general (observations about elements of the website, including the presence of social media, advertisements, etc.). (See Appendix 2 for a full coding sheet.)

In most analyses, multiple coders are used and a system to ensure uniformity is adopted (Haggarty 1996). However, because this research will involve simple counting, the researcher will be the sole analyzer.

After all of the data is gathered, the researcher will perform a series of paired-samples t-tests to analyze the results. The paired-samples t-test is a way to analyze data that is paired into corresponding groups ("Understanding statistics: Paired t-test," 2003). Result of the test show whether the counts vary significantly. For this research, pairs for each newspaper will be type of author online vs. type of author in print, number of stories online vs. number of stories in print, etc. It is appropriate in this circumstance because this research deals with two counts and/or means in various categories that can be compared against each other.

Three daily newspapers will have seven days analyzed, one daily newspaper will have six (one "Weekend Edition" issue counts for both Saturday and Sunday), three non-

daily newspapers will have four issues (one per week), and one non-daily newspaper (published twice per week) will have eight issues. Because sample sizes will vary, the researcher will calculate per-day and per-issue averages for each category in order to compare the various newspapers. Online counts will comprise all elements appearing on the home page of the newspaper website on the day in question, and print counts will comprise the entire newspaper issue.

Population selection

For a manageable thesis project and to have more than one sample from each of four size/frequency categories, the sample size will be eight newspapers. In order to narrow down the population size, a list of newspapers was compiled from NewsLink.org, a comprehensive inventory of newspapers in the U.S. The list was separated into daily and non-daily (weekly or bi-weekly) newspapers, and from that list eight publications were randomly selected. Four newspapers had a circulation of 23,000 or less, and four had a circulation between 23,000 and 50,000.

Daily newspapers to be analyzed include: *The Mining Journal* and MiningJournal.net in Marquette, Mich., circulation 18,000; the *Journal Tribune* and JournalTribune.com in Biddeford, Maine, circulation 8,415; the *Dothan Eagle* and DothanEagle.com in Dothan, Ala., circulation 38,000; and *The Daily Advertiser* and TheAdvertiser.com in Lafayette, La., circulation 45,400.

Non-daily newspapers to be analyzed include: the *Missoula Independent* and MissoulaNews.BigSkyPress.com in Missoula, Mont., circulation 22,103; *The Newberg Graphic* and NewbergGraphic.com in Newberg, Ore., circulation 4,957; the *Delaware*

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Wave and DelawareWave.com in Bethany Beach, Del., circulation 22,000; and *Boulder Weekly* and BoulderWeekly.com in Boulder, Colo., circulation 35,000.

Based on possible variations in day-to-day content such as amount of ad space, analysis of daily newspapers will be based on a constructed-week approach. For four weeks, different weekdays will be selected for analysis. Two days will be chosen each of the first three weeks and the final day will be represented during the fourth week, and after four weeks each day will have been represented. Non-daily newspapers will also be analyzed over the course of this four-week period, and averages will be calculated per issue in order to compare numbers. The researcher will contact circulation departments and arrange to have corresponding print copies sent from each of the newspapers except *Boulder Weekly*; the publication's website included an archive of PDFs of each week's issue, so these files will be downloaded and analyzed.

Data will gathered beginning in mid-January, and the researcher will analyze each website between the hours of 4 p.m. and 10 p.m. Data will be gathered every evening in order to analyze the content that was posted during the day. For each entry, various components (e.g. comments, links, photos, videos, etc.) will be examined and coded for the elements contained within the entry. Qualitative comparisons will also be made by the researcher comparing presentation and content for newspaper websites and their printed counterparts (see Appendix 1 for detailed descriptions of the newspapers, their websites and their communities).

After determining how content compares between online and print versions of community newspapers, this researcher hopes to explain why they are offering these particular components. Interviews will be conducted with an editor, publisher or Web

designer from each newspaper to determine their motivations for using these platforms and to assess the readership of their newspapers compared to the websites. The researcher will also contact the communications director at the National Newspaper Association in an attempt to gauge industry trends.

During these interviews, the researcher will ask questions regarding ownership (independent vs. group-owned), circulation, location (population, demographics, etc.), resource level (staff size, ad revenue, management of the website, etc.), relationship (or not) with Google, satisfaction (or not) with the current Web offerings, readership of the site, percentage of articles and other elements that are in print versus on the website, and whether the news that appears on the website is "shovelware" (simply "shoveled" from the print version to an online format) or if it is original/breaking news. (See Appendix 3 for a full transcript of the semi-structured interview.)

Challenges

Geographic diversity has the potential to be a limitation because differences exist in different regions around the country. The relatively short time period of the study could also affect outcomes, as will the small sample size.

Chapter 4
Results

This study examines the ways eight community newspapers are using the

Internet to disseminate news; specifically, how these newspapers' print versions differ

from their website homepages. A quantitative content analysis was used to evaluate a

randomly selected sample of eight newspapers of varying circulation sizes and frequency

of publication. The content analysis used paired-sample t-tests to evaluate differences

between print and online products in the following categories: author (staff or non-staff

writer), content type, and content topic. Then, statistical analyses were used to analyze

the results of the content analysis. This chapter reviews the results of the content analysis

and statistical analyses.

Summary of Research Questions

The following research question was addressed through a quantitative content

analysis and statistical analyses:

> **RQ1:** How does content compare between print and online versions of
> community newspapers?
>   a. Does the amount of staff- and non-staff produced content vary?
>   b. Does the content type differ?
>   c. Do entry topics significantly vary?

Print newspapers and newspaper website home pages were analyzed for eight

community newspapers around the country: the *Dothan Eagle*, the *Journal Tribune*, the

Mining Journal, the *Daily Advertiser*, *Boulder Weekly*, the *Delaware Wave,* the *Missoula*

Independent, and the *Newberg Graphic*. The random sample was selected using a

population gathered from NewsLink.org in a manner suggested by Riffe and Lacy (1995),

who advocated a constructed-week approach to daily newspaper sampling. This method of sampling yielded a total of 26,427 items of content from 46 printed newspaper editions and 46 website homepages, with the following breakdown: 4,070 stories, 8,871 photos, 75 videos, 6 slideshows, 731 graphics, 25 interactive graphics, 5,309 links, 1,442 instances of related media, and 5,898 user comments.

The daily *Dothan Eagle* is published in Dothan, Ala., and has a circulation of 38,000. It serves the Dothan metro area of 65,496 people. The *Journal Tribune* is a suburban paper published in Biddeford, Maine, population 20,942. It has a circulation of 8,415 and is published six times per week. The *Mining Journal* is published in Marquette, Mich., population 19,661. This daily suburban newspaper has a circulation of 18,000. The *Daily Advertiser*, circulation 45,400, is published daily in Lafayette, La., the cultural center of a southern Louisiana region known as Acadiana. The city of Lafayette has a population of 110,257, but the metropolitan area of Acadiana includes more than 450,000 people.

The *Boulder Weekly* is a free alternative weekly newspaper with a circulation of 35,000. It serves the Boulder suburban area of 94,673 people. The *Delaware Wave* is a 22,000-circulation weekly newspaper published in Salisbury, Md., but targets readers in Salisbury as well as Delaware towns Bethany Beach, Clarksville, Dagsboro, Fenwick Island, Frankford, Georgetown, Millville, Millsboro, Ocean View, Omar, Roxana, Selbyville and South Bethany. Salisbury is the hub of an area known as the Salisbury-Ocean Pines Combined Statistical Area, which includes the Salisbury metro area as well as the Ocean Pines metro area. According to the 2000 census, the most recent official data, there were 23,743 people in Salisbury and 155,934 people in the combined area.

The *Missoula Independent* is a weekly newspaper with a circulation of 22,103. The newspaper is published in Missoula, Mont., which has a population of 68,876, but also serves the whole metropolitan Missoula area of 95,802 people. The *Newberg Graphic* is a bi-weekly newspaper with a circulation of 4,957, and is published in Newberg, Ore., population 18,064. It is published twice per week (on Wednesdays and Saturdays) and serves a relatively small suburban area. (See Appendix 1 for a full list of the newspapers analyzed and detailed descriptions of their printed newspapers, their websites, and the communities they serve.)

Counts of items of content for individual newspapers are as follows: the *Dothan Eagle*'s website yielded a total of 8,446 and a daily average of 1,205.57 items, and the print newspaper yielded a total of 896 and a daily average of 128 items; the *Journal Tribune*'s website yielded a total of 183 and a daily average of 30.50 items, and the print edition yielded a total of 507 and a daily average of 84.5 items; the *Mining Journal*'s website yielded a total of 4,260 and a daily average of 608.57 items, and the print newspaper yielded a total of 803 and a daily average of 114.71 items; the *Daily Advertiser*'s website yielded a total of 5,931 and a daily average of 847.29 items, and the print newspaper yielded a total of 1,130 and a daily average of 161.43 items

The *Boulder Weekly*'s website yielded a total of 930 and a daily average of 232.5 items, and the print newspaper yielded a total of 257 and a daily average of 64.25 items; the *Delaware Wave*'s website yielded a total of 1,264 and a daily average of 316 items, and the print newspaper yielded a total of 453 and a daily average of 113.25 items; the *Missoula Independent*'s website yielded a total of 414 and a daily average of 103.5 items, and the print newspaper yielded a total of 262 and a daily average of 65.5 items; and the

Newberg Graphic's website yielded a total of 226 and a daily average of 32.29 items, and the print newspaper yielded a total of 465 and a daily average of 66.43 items (see Figure 1).
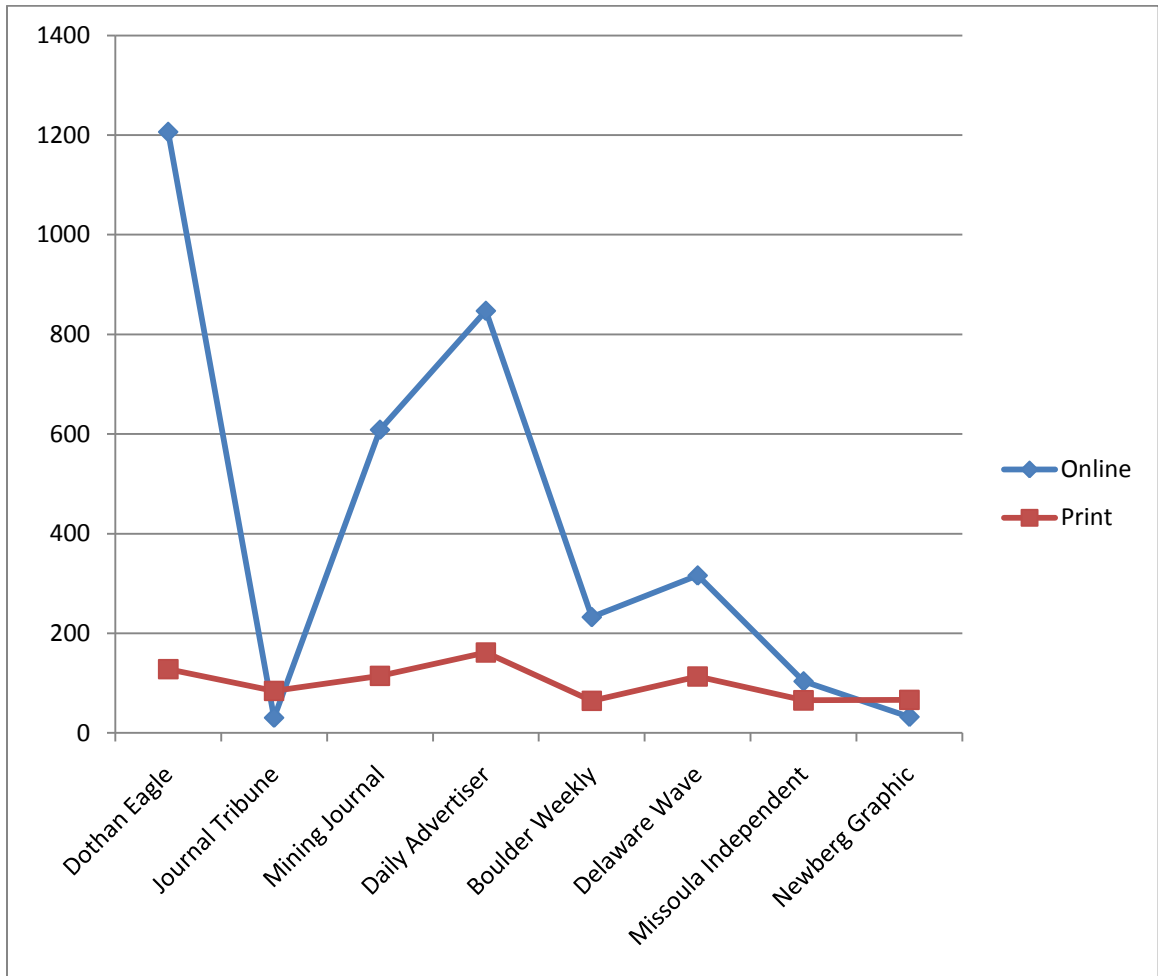
Figure 1 Daily Averages by Newspaper

The first section of research examined differences in the number of staff-written content compared to content provided by non-staff writers (see Figure 2**)**. In order to create comparable data sets, averages were taken from each compilation of newspapers to create per-day and per-issue numbers.
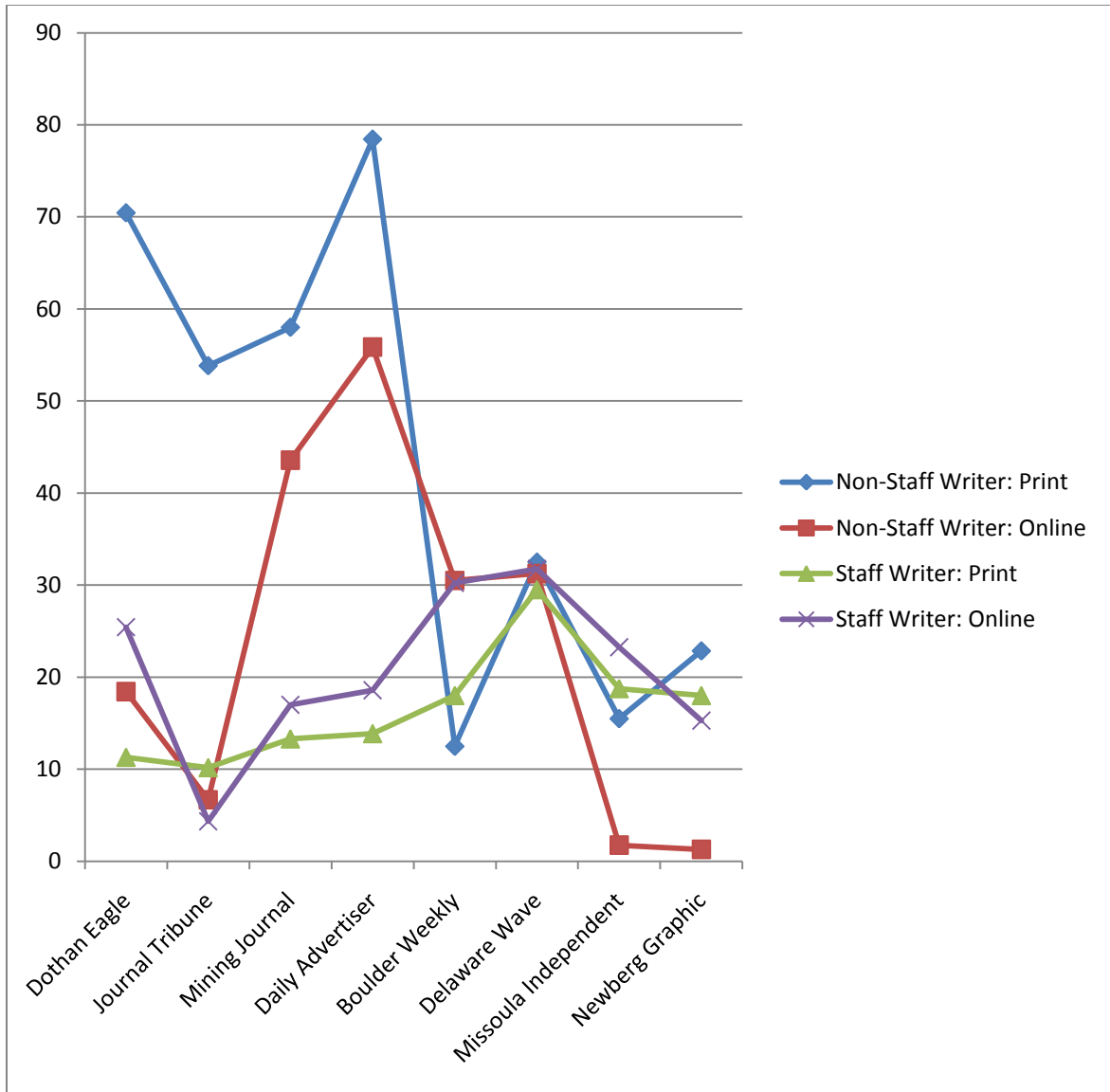
Figure 2 Author Means by Newspaper

For the *Dothan Eagle*, paired-sample t-tests showed statistically significant differences (p< .05) in the number of articles written by staff writers (means of 25.43 online and 11.29 in print) and those written by non-staff writers (means of 18.43 online and 70.43 in print).

For the *Journal Tribune*, paired-sample t-tests showed statistically significant differences (p< .05) in the number of articles written by non-staff writers (means of 6.67

online and 53.83 in print), and no significant difference (p> .05) in the number of articles written by staff writers (means of 4.33 online and 10.17 in print).

At the *Mining Journal*, paired-sample t-tests showed statistically significant differences (p< .05) in the number of articles written by non-staff writers (means of 43.57 online and 58 in print) and no significant difference (p> .05) in the number of staff-written articles (means of 17 online and 13.29 in print).

Paired-sample t-tests for the *Daily Advertiser* showed statistically significant differences (p< .05) in instances of staff-written articles, with means of 18.57 (online) and 13.86 (print) and no significant difference (p> .05) in instances of articles written by non-staff writers, with means of 55.86 (online) and 79.43 (print).

For *Boulder Weekly*, paired-sample t-tests showed significant differences in both staff and non-staff writers for the *Boulder Weekly*, with averages of 30.25 (online) and 18 (print) for staff-written articles and 30.50 (online) and 12.50 (print) for articles written by non-staff writers (p<.05). Means were significantly higher in the print product.

Paired-sample t-tests for the *Delaware Wave* showed no significant difference (p> .05) in articles written by staff writers (means of 31.75 online and 29.50 in print) and articles written by non-staff writers (means of 31.25 online and 32.50 in print).

For the *Missoula Independent*, paired-sample t-tests showed statistically significant differences (p< .05) in articles written by both staff writers (means of 23.25 online and 18.75 in print) and non-staff writers (means of 1.75 online and 15.50 in print).

For the *Newberg* Graphic, paired-sample t-tests showed statistically significant differences (p< .05) in the number of articles written by non-staff writers (means of 1.29

online and 22.86 in print) but no significant difference (p> .05) in staff-written articles (means of 15.29 online and 18 in print).

The second section of research examined differences in content type (see Tables 1 and 2). In order to create comparable data sets, averages were taken from each compilation of newspapers to create per-day and per-issue numbers. Because stories, photos, and graphics were the content types that could appear in both online and print formats, they were compared through a series of paired-sample t-tests.

Table 1: Means of Content Type by Newspaper (Daily)

	Dothan Eagle	_Journal Tribune_	_Mining Journal_	_Daily Advertiser_
Story				
Online	42	12	50.43	59.29
Print	55.71	49.3	50.86	68
Photo				
Online	15.86	5.17	513.43	400.71
Print	35.42	23.17	34.29	64.71
Graphic				
Online	.29	0	.86	.29
Print	28.71	0	24.57	28.43

In research for the _Dothan Eagle_, paired-sample t-tests showed statistically significant differences (p< .05) in the following entry types: stories (means of 42 online and 55.71 in print), photos (means of 15.86 online and 35.42 in print), and graphics (means of .29 online and 28.71 in print).

At the _Journal Tribune_, paired-sample t-tests showed statistically significant differences (p< .05) in the number of stories (means of 12 online and 49.3 in print) and photos (means of 5.17 online and 23.17 in print). There were no graphics in either format.

Paired-sample t-tests for the *Mining Journal* showed statistically significant differences (p< .05) in the number of photos (means of 513.43 online and 34.29 in print), videos (means of 5.29 online and 0 in print) and graphics (means of .86 online and 24.57 in print). The same tests showed no significant difference (p> .05) in the number of stories, with means of 50.43 online and 50.86 in print.

For the *Daily Advertiser*, paired-sample t-tests showed statistically significant differences (p< .05) in photos (means of 400.71 online and 64.71 in print) and graphics (means of 29 online and 28.43 in print), and no significant difference (p> .05) in the number of stories (means of 59.29 online and 68 in print).

Table 2: Means of Content Type by Newspaper (Non-Daily)

	Boulder Weekly	*Delaware Wave*	*Missoula Independent*	*Newberg Graphic*
Story				
Online	59	56.25	22.75	16.14
Print	29.50	56.75	32.75	40.43
Photo				
Online	32.25	107	27	12.43
Print	11.75	53	29.5	17
Graphic				
Online	1.50	0	3.5	0
Print	5.25	0	3.25	2.14

For *Boulder Weekly*, paired-sample t-tests showed significant differences (p< .05) in instances of stories (means of 59 online and 29.5 in print), photos (means of 32.25 online and 11.75 in print) and graphics (means of 1.5 online and 5.25 print.

At the *Delaware Wave*, paired-sample t-tests showed no significant difference (p> .05) in stories (means of 56.25 online and 56.75 in print), photos (means of 107 online and 53 in print), or graphics (means of 0 online and 2 in print).

In research for the *Missoula Independent*, paired-sample t-tests showed statistically significant differences (p< .05)in the number of stories (means of 22.75 online and 32.75 in print), and no significant difference (p> .05) in the number of photos (means of 27 online and 29.5 in print) or graphics (means of 3.5 online and 3.25 in print).

For the *Newberg Graphic*, paired-sample t-tests showed statistically significant differences (p< .05) in the number of stories (means of 16.14 online and 40.43 in print) and graphics (means of 0 online and 2.14 in print). The same tests showed no significant difference (p> .05) in the number of photos (means of 12.43 online and 17 in print).
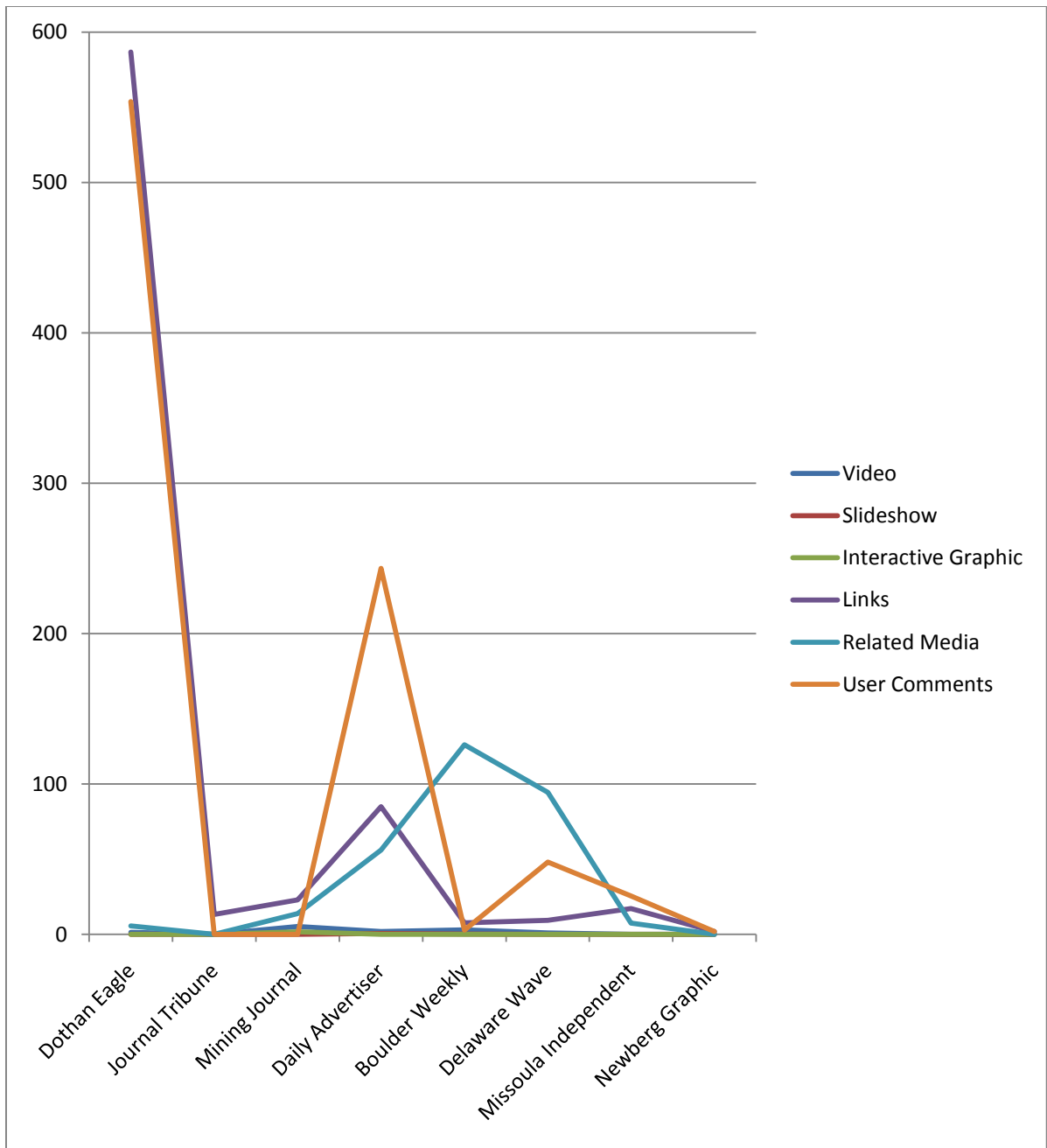
Figure 3 Online Content Types

Certain content types were most common and/or only available online (videos, slideshows, interactive graphics, links, related media, and user comments). In analyzing the eight newspaper websites, it becomes clear that there is a range of use in adopting various technologies (see Figure 3).

Links were the most commonly used form of online technology, with all eight newspapers embedding links either within or directly after stories. The daily averages ranged from 7.75 at the *Boulder Weekly* to 586.71 at the *Dothan Eagle*. The huge number of links at the *Dothan Eagle* skewed the data and shows a significant difference between dailies and non-dailies, but even taking this into account the dailies used links more often than non-dailies. Some newspapers even printed links, showing cross-promotion between the two forms of media.

Linking to related media (e.g. articles with similar topics or written by the same author) was used at six of the eight newspapers (three dailies and three non-dailies), with more use at the weekly newspapers. Two dailies and all four weeklies had reader participation in the form of user comments, but even the two dailies without comments offered this particular technology – readers had just not taken advantage of it. The two dailies with comments (the *Dothan Eagle* and the *Daily Advertiser*), however, had large numbers of comments and illustrated a significant increase compared to the non-dailies.

Video seems to still be a lesser-used technology, but it was adopted fairly equally. It was most often offered by daily newspapers (with three of the four providing at least some video content) and, to a lesser extent, non-dailies (two of the four posted videos). Slideshows were uncommon, with one daily and one non-daily providing this content. Interactive graphics were even more uncommon, with only one daily newspaper offering interactivity in the form of a local weather search.

The third section of research examined differences in entry topic (see Tables 3 and 4). Again, averages were taken for each newspaper to create per-issue numbers.

Table 3: Means of Content Topic by Newspaper (Daily)

		Dothan Eagle	*Journal Tribune*	*Mining Journal*	*Daily Advertiser*
Breaking News					
	Online	10.14	0	1.14	0
	Print	0	0	0	0
Politics/Government					
	Online	3.71	1.5	5.43	14.43
	Print	8	7.67	4.43	8.29
Crime					
	Online	11.57	.5	.43	8
	Print	4.29	1.33	2.43	1.29
Health/Science					
	Online	1.86	.5	2.71	2.43
	Print	3.57	2.67	1.29	1.86
Sports					
	Online	6.71	1	12.86	9
	Print	16.29	10.17	15.43	19.14
Education					
	Online	1.14	.67	3	2.29
	Print	2.14	2.33	1	1.14
Lifestyle/Feature					
	Online	4.71	2.5	5.14	6.29
	Print	28.71	6.5	23.14	28.29
Arts/Entertainment					
	Online	.71	.33	4	4
	Print	2.29	8.83	1.14	2.71
Faith					
	Online	1.29	0	.29	2.43
	Print	.14	.83	.57	1.57
Business					
	Online	3.29	.5	1.43	6
	Print	3.57	1.33	3.14	6.43
Obituary					
	Online	.43	3.67	5.71	.29
	Print	1.43	4.67	1.14	7.57
Community/Local					
	Online	4.86	1	18	14.86
	Print	6.57	5.33	10.57	7.71
Editorial					
	Online	5.86	.83	1.29	8.43
	Print	5.75	4.17	5.14	8.14

For the *Dothan Eagle*, paired-sample t-tests showed statistically significant differences (p< .05) for breaking news (means of 10.14 on line and 0 in print), politics/government (means of 3.71 online and 8 in print), crime (means of 11.57 online and 4.29 in print), and lifestyle/feature articles (means of 4.71 online and 28.71 in print). The same tests showed no significant difference (p> .05) in the following news categories: health/science (means of 1.86 online and 3.57 in print), sports (means of 6.71 online and 16.29 in print), education (means of 1.14 online and 2.14 in print), arts/entertainment (means of .71 online and 2.29 in print), faith (means of 1.29 online and .14 in print), business (means of 3.29 online and 3.57 in print), obituaries (mans of .43 online and 1.43 in print), community/local (means of 4.86 online and 6.57 in print), and editorial (means of 5.86 online and 5.57 in print).

Paired-sample t-tests for the *Journal Tribune* showed statistically significant differences (p< .05) in the following news categories: politics/government (means of 1.5 online and 7.67 in print), sports (means of 1 online and 10.17 in print), education (means of .67 online and 2.33 in print), arts/entertainment (means of .33 online and 8.83 in print), community/local (means of 1 online and 5.33 in print), and editorial (means of .83 online and 4.17 in print). The same tests showed no significant difference (p> .05) in the following news categories: crime (means of .5 online and 1.33 in print), health/science (means of .5 online and 2.67 in print), lifestyle/feature (means of 2.5 online and 6.5 in print), faith (means of 0 online and .83 in print), business (means of .5 online and 1.33 in print), and obituaries (means of 3.67 online and 4.67 in print). There were no breaking news articles in the *Journal Tribune*.

In research for the *Mining Journal*, paired-sample t-tests showed statistically significant differences ($p < .05$) in the following news categories: breaking news (means of 1.14 online and 0 in print), crime (means of .43 online and 2.43 in print), health/science (means of 2.71 online and 1.29 in print), sports (means of 12.86 online and 15.43 in print), education (means of 3 online and 1 in print), lifestyle/feature (means of 5.14 online and 23.14 in print), arts/entertainment (means of 4 online and 1.14 in print), obituaries (means of 5.71 online and 1.14 in print), community/local (means of 18 online and 10.57 in print), and editorial (means of 1.29 online and 5.14 in print). The same tests showed no significant difference ($p > .05$) in politics/government (means of 5.43 online and 4.43 in print), faith (means of .29 online and .57 in print), and business articles (means of 1.43 online and 3.14 in print).

Paired-sample t-tests in data for the *Daily Advertiser* showed statistically significant differences ($p < .05$) in stories in the following categories: politics/government (means of 14.43 online and 8.29 in print), crime (means of 8 online and 1.29 in print), sports (means of 9 online and 19.14 in print), education (means of 2.29 online and 1.14 in print), lifestyle/feature (means of 6.29 online and 28.29 in print), arts/entertainment (means of 4 online and 2.71 in print), and obituaries (means of .29 online and 7.57 in print). The same tests showed no significant difference ($p > .05$) in articles in the following categories: health/science (means of 2.43 online and 1.86 in print), faith (means of 2.43 online and 1.57 in print), business (means of 6 online and 6.43 in print), community/local (means of 14.86 online and 7.71 in print), and editorial (means of 8.43 online and 8.14 in print). There were no breaking news articles for the *Daily Advertiser*.

Table 4: Means of Content Topic by Newspaper (Non-Daily)

		Boulder Weekly	*Delaware Wave*	*Missoula Independent*	*Newberg Graphic*
Breaking News					
	Online	0	0	0	.14
	Print	0	0	0	0
Politics/Government					
	Online	11.5	5.75	5.5	1.29
	Print	3	3	3.5	3.14
Crime					
	Online	4	10.5	1.5	1.71
	Print	.5	3.5	.5	1.57
Health/Science					
	Online	1.5	.75	1	1
	Print	,75	2.25	1.25	2.71
Sports					
	Online	1	9	0	3.14
	Print	.75	10	.75	8.43
Education					
	Online	1.5	2	4.25	1.86
	Print	0	3.25	0	2.14
Lifestyle/Feature					
	Online	7	8.75	7.25	2.71
	Print	7.5	5.75	6	2.29
Arts/Entertainment					
	Online	20	2	0	1.57
	Print	10.25	2.5	11.25	2.29
Faith					
	Online	0	.25	1.25	0
	Print	.5	0	0	3.14
Business					
	Online	6.25	4.25	1.25	1.14
	Print	3	5	0	1.43
Obituary					
	Online	.5	1	0	.57
	Print	.25	4.5	0	1
Community/Local					
	Online	6.75	14.5	3.5	2.43
	Print	4.75	16.5	6.5	8.14
Editorial					
	Online	3	3.5	1.25	.29
	Print	1.75	4.5	2.75	6

For *Boulder Weekly*, paired-sample t-tests showed statistically significant differences ($p < .05$) in instances of the following topics: politics/government (means of 11.5 online and 3 in print), crime (means of 4 online and .5 in print), arts/entertainment (means of 20 online and 10.25 in print), and editorial (means of 3 online and 1.75 in print). The same tests showed no significant differences ($p > .05$) in instances of the following topics: health/science (means of 1.5 online and .75 in print), sports (means of 1 online and .75 in print), education (means of 1.5 online and 0 in print), lifestyle/feature (means of 7 online and 8.5 in print), faith (means of 0 online and .5 in print), business (means of 6.25 online and 3 in print), obituaries (means of .5 online and .25 in print), and community/local (means of 6.75 online and 4.75 in print). There were no stories falling into the "breaking news" category.

At the *Delaware Wave,* paired-sample t-tests showed statistically significant differences ($p < .05$) in the number of health/science articles, with means of .75 (online) and 2.25 (print). The same tests showed no significant difference ($p > .05$) in the number of articles in the following categories: politics/government (means of 5.74 online and 3 in print), crime (means of 10.5 online and 3.5 in print), sports (means of 9 online and 10 in print), education (means of 2 online and 3.25 in print), lifestyle/feature (means of 8.75 online and 5.75 in print), arts/entertainment (means of 2 online and 2.5 in print), faith (means of .25 online and 0 in print), business (means of 4.25 online and 5 in print), obituaries (means of 1 online and 4.5 in print), community/local (means of 14.5 online and 16.5 in print), and editorial (means of 3.5 online and 4.5 in print). There were no breaking news articles in the *Delaware Wave*.

In research for the *Missoula Independent*, paired-sample t-tests showed statistically significant differences (p< .05) in the number of education (means of 4.25 online and 0 in print) and arts/entertainment articles (means of 0 online and 11.25 in print). The same tests showed no significant difference (p> .05) in the following news categories: politics/government (means of 5.50 online and 3.5 in print), crime (means of 1.5 online and .5 in print), health/science (means of 1 online and 1.25 in print), sports (means of 0 online and .75 in print), lifestyle/feature (means of 7.25 online and 6 in print), faith (means of 1.25 online and 0 in print), business (means of 1.25 online and 0 in print), community/local (means of 3.5 online and 6.5 in print), and editorial (means of 1.25 online and 2.75 in print). There were no breaking news stories or obituaries in the *Missoula Independent*.

For the *Newberg Graphic,* paired-sample t-tests showed statistically significant differences (p< .05) in the following news categories: sports (means of 3.14 online and 8.43 in print), faith (means of 0 online and 3.14 in print), community/local (means of 2.43 online and 8.14 in print), and editorial (means of .29 online and 6 in print). The same tests showed no significant difference (p> .05) in the following categories: breaking news (means of .14 online and 0 in print), politics/government (means of 1.29 online and 3.14 in print), crime (means of 1.71 online and 1.57 in print), health/science (means of 1 online and 2.71 in print), education (means of 1.86 online and 2.14 in print), lifestyle/feature (means of 2.71 online and 2.29 in print), arts/entertainment (means of 1.57 online and 2.29 in print), business (means of 1.14 online and 1.43 in print), and obituaries (means of .57 online and 1 in print).

In summary, the data for part one show that more significant differences between authors (10) than non-significant differences (six). For staff writers, there were even amounts of significant and non-significant differences, and for non-staff writers, there were more significant differences (six) than non-significant differences (two).

The data for part two show more significant differences between content types (34) than non-significant differences (17). There were more significant differences in the following categories: stories, photos, graphics, interactive graphics, links and related media. There were more non-significant differences for slideshows, and an equal number of significant and non-significant differences in for videos and user comments.

The data for part three show more non-significant differences between content topics (56) than significant differences (38). There were more significant differences in the breaking news, crime, and arts/entertainment categories, and more non-significant differences in the following categories: politics/government, health/science, lifestyle/feature, faith, business, obituaries, and community/local. There were an equal number of significant and non-significant differences for sports, education, and editorial stories.

Chapter 5
Discussion and Conclusions

This chapter will discuss the implications of the statistical analyses conducted in this research and will explain the outcomes using relevant literature and information from editors of the newspapers analyzed. The limitations of this study and possibilities for future research will also be discussed.

Analysis of Research

This study used paired-sample t-tests to evaluate the following research question:

RQ1: How does content compare between print and online versions of community newspapers?
      a. Does the amount of staff- and non-staff produced content vary?
      b. Does the content type differ?
      c. Do entry topics significantly vary?

Explaining the Quantitative Data

This study presents progress toward explaining some of the ways community newspapers are adapting to the Internet age. The results provide both theoretical and practical insights into adaptation to Internet technologies for both readers and those providing news content. Analysis of the content offered by eight community newspapers supports findings of other online research and theories described in the literature reviewed for this study.

Social construction of technology theory describes technology as a product of users' personal testing and choice; individuals are exposed to a huge number of technologies, and, through trial and error, select those which appeal most to their uses (Pinch & Bijker, 1987). The theory comprises four elements: interpretive flexibility, a variety of interpretations depending on circumstance; relevant social group, the ability of

groups to influence technology's transformation and design; closure and stabilization, the point at which users agree on certain aspects of a technology and it ceases its transformation; and "the wider context," social, cultural, and political phenomena that surround the technology as it develops (Pinch & Bijker, 1987). Wajcman (2002) agreed, stating that technologies constantly evolve based on user preference and magnitude of use.

The tendency of each newspaper to offer a variety of online and interactive options coincides with this theory. Providing a wide selection of choices means users may test and choose which elements they like best; the most popular options will predictably win out and the structure of each website could shift over time.

This research seems to disagree, however, with the literature reviewed concerning differences in geographical area. A study by DuBick (1978) found that the complexity of a news organization is directly related to that of its targeted community, and Griswold (1991) found that content diversity is also dependent on structural indicators in the community. Each newspaper analyzed, regardless of the size of its audience, has a strong Web presence. The websites all contain large amounts of information and interactive options, and this seems fairly consistent regardless of the newspaper's geographic area. Even the *Journal Tribune*'s website, which had the smallest daily average of content presented, offered a variety of interactive components – features that only appear online, a tease to that day's print front page, RSS feeds, and downloadable PDFs of recent special sections.

Community sizes ranged from just over 18,000 (in Newberg, Ore.) to over 110,000 (in Lafayette, La.). Based on its unique design, which featured a set 12 items of

content each day, the *Journal Tribune* had the lowest amount of online content and the third-lowest population. The *Newberg Graphic* had the smallest population and the second-lowest amount of online content. The *Dothan Eagle* had the largest amount of online content and the third-highest population. The *Daily Advertiser*, located in Lafayette, La., had the largest population and the second-highest amount of online content. The *Mining Journal*, with the third-largest amount of online content, had the second-lowest population. It appears that the size of the community served does not necessarily indicate the amount of content its newspaper website will provide. Regardless of size, all newspaper websites provided a well-stocked website with a variety of options.

One noticeable difference, and one that was in agreement with the literature reviewed for this research, was that the daily newspapers tended to utilize more content provided by non-staff writers, most noticeably in their print editions but also to a lesser degree on their websites. One explanation for this is that daily newspapers tend to include more national and international news, which would likely be provided by a wire service. The daily newspapers also tend to target a broader audience and therefore must keep a certain amount of generality in their offerings to appeal to a large population (Boone, Carrol, & van Witteloostuijn, 2002).

The per-issue average of amount of content offered in print is similar across the eight newspapers, but the daily newspapers did tend to offer more online content (except the *Journal Tribune*, which stood out as a uniquely designed and uncommon newspaper website). This could be explained by Pinch and Bijker's (1987) research on social construction of technology theory. They argued that users sift through a multitude of

technology and ultimately settle on the types that work best for them. Because daily

newspapers tend to target a broader audience it would make sense to offer more content

in hopes of appealing to the largest percentage of their readers (Pinch and Bijker, 1987).

In addition, resource allocation theory states that large organizations target specific areas

of consumers with disposable income, and due to the larger audience targeted by daily

newspapers, it stands to reason that more content would be necessary in order to reach the

multiple groups being targeted (Carroll, 1985).

Appealing to readership is the largest reason why newspapers would provide

varied content on their website, and the results of this study show that all eight

newspapers provide a wide variety of online offerings in terms of content type and entry

topic. Rosenstiel and Mitchell (2004) suggested that the number-one way to increase

revenue is to make news content more diverse, and it appears that all eight newspapers

are taking this advice to heart.

Two daily newspapers and all four of the non-dailies invited reader participation

in the form of user comments. The dailies that had no participation offered the

technology, but readers did not take advantage of the opportunity to comment. The two

dailies had high numbers of comments (daily averages ranged from 243 to 553), which

reflects the reality that these newspapers have larger audiences. The fact that all four

non-daily newspapers had reader participation could be an effect of the smaller target

audience; a newspaper that targets fewer people is able to achieve a more personalized

experience for readers by inviting to join the conversation. If people feel more ownership

of the product, they might feel more comfortable expressing their opinions, thus building

a bond with the newspaper.

One particular group many newspapers are targeting is Generation Y, the generation born between 1982 and 2002. This young generation will soon overtake baby boomers as the largest group of adults, and for this group, technology is key. Technology is extending into almost every aspect of life, and the younger generation expects their news sources to follow the trend (McCleneghan, 2005).

One technology that may appeal to Gen Y is video, and this is also a complicated, expensive technology that requires specific training in shooting and editing. The occurrence of videos used was surprisingly consistent; three dailies used it, as well as two non-dailies. There seemed to be little correlation between size and the use of video technology, but newspapers that do not utilize video attribute this to lack of funding, time, or manpower.

The *Dothan Eagle*, for example, is one of the larger newspapers and has the resources to train reporters in video production. The *Newberg Graphic,* however, one of the larger non-daily publications, does not have the money to hire staff to manage the website so it falls to the editor, Gary Allen. He says the website's absence of video capability is partly because of his own limited experience in the area, and partly because there just isn't time.

"We don't have the luxury of a webmaster who can do this all themselves; it's just me, and I have a lot of other irons in the fire," he said. "We do the best we can with the resources we have."

Mokhtarian and Saloman (1997) presented research in which they declared that a user's job description could affect how people perceived potential usefulness and ease of use of any given technology. People who interacted daily with advanced technology in

their professional environment would be likely to value this technology in their personal lives as well.

Colleges and/or universities tended to be among the largest employers in the towns that contain them. Because colleges and universities have a distinctly young culture, adoption of various technologies is high in these environments. If a large portion of a community has consistent interaction with this type of culture, it stands to reason that the use of such technologies will also translate to home and personal lives. Boulder, Colo., is the home of Colorado's largest university, and the growing population of college students and young professionals just out of college creates a relatively young community; in the eight newspapers surveyed, Boulder tied with Newberg, Ore., for the youngest median age (29 years), and both cited universities as their largest employers (along with Lafayette, La., and Missoula, Mont.). Boulder has also been ranked as the country's most educated city, with 69 percent of the community holding bachelor's degrees or higher educational certification. People with higher education levels tend to hold higher-paying and more technically advanced employment, and as such might be more likely to adopt and demand technology.

In addition, research shows that newspaper readers are more educated and earn more money than their non-newspaper-reading counterparts (Hu, Wanta, & Wu, 1995). Readers of newspaper websites are likely to have similar characteristics, and this could mean that all targets of a newspaper website, regardless of their culture or community, would have comparable levels of education and professional success.

However, the appeal of such technology isn't limited by one's occupation. In addition to universities, common employers in this research included agriculture,

manufacturing, medicine, and aerospace, but there was not a significant difference in the amount and complexity of available technology among these communities. This shows that, regardless of a community's size or culture, technology is becoming commonplace. Sarker and Wells (2003) cited the "anytime, anywhere" aspect of mobile wireless technology as its most appealing characteristic. No matter where people live, they want to have the ability to access their technology whenever and wherever they desire. Junglas and Watson (2003) presented research asserting that the degree to which users can reach others within their "networks" (whether it be through cell phones, social media, etc.) is a highly attractive trait of such technology. This is a draw for most people nowadays, regardless of education level or culture.

Lemke (2003) discussed the use of hyperlinks and interactive elements to enhance a website's effectiveness. This technology is quick, simple, and adds a whole new dimension of information-providing. The newspapers analyzed all took advantage of embedding hyperlinks in their online offerings; indeed, it was the most common technology observed in this research. Some print newspapers even utilized URLs to direct the reader to their website or another website for more information. Another form of hyperlinking used was the practice of linking to related media from individual stories. Six of the eight newspapers, evenly split between dailies and non-dailies, used this technology. Many publications also used other interactive elements (ranging from newspaper-hosted blogs and discussion forums to enabling reader comments to providing a list of most-emailed or most-commented-on stories), but interactive graphics were very uncommon – only one daily newspaper offered the option.

All newspapers analyzed, however, continue to have strong readership of their print products. While the Internet allows a multitude of information and interactivity options, some users find this to be overwhelming and distracting (Dunwoody & Eveland, 2001). Instead of paging through the newspaper in order, an online reader must be self-determined enough to search through advertisements, links, and photos to find the information they are searching for. This style of news reading still does not appeal to many readers, and thus a print product is still in demand and turning a profit for each of the eight newspapers. This is another facet of the social construction of technology theory, as well as the technology acceptance model. Many options are presented (including both online and print alternatives), and readers are able to select the one that most appeals to them.

Implications

In the future, those running newspapers must be aware of the increase in demand for online news presence, even at the community level. A variety of factors (location, community, culture, available technology, etc.) influences, which technologies readers of a newspaper will appreciate or utilize, but one fact remains clear: technology is steadily advancing. Advances in expertise and equipment will spread to every field, and journalism will be no exception. As technology advances, so must offerings presented by newspaper websites.

This research suggests there is no one way community newspapers are embracing the Internet; however, keeping an eye on other newspapers is an important way for newspapers to stay current and competitive in terms of content and technology offered.

In addition, attracting young people should be a concern for newspapers, and research suggests that online and interactive material is the way to do this (McCleneghan, 2005).

There are no real indicators that point to which technologies newspaper websites or their readers will adapt. The newspapers in this study varied in their size and the culture of the communities served, but they all provided a wide variety of interactive offerings. The types of employment and education level also varied, but, contrary to research from previously reviewed literature, this did not seem to affect the types of content offered.

Interviews with a few editors from the analyzed newspapers and Stan Schwartz, the National Newspaper Association's communications director and editor of *Publisher's Auxiliary*, shed some light on the factors that might affect varying print and Web strategies, since demographic and geographical factors suggested by the reviewed literature had little or no effect.

Schwartz says more and more weekly newspapers are turning to a Web-first strategy to compete with others in the industry, which means updating the website more continually to create a product that ultimately feels more like a daily.

"Whenever there's a new medium, people tend to try cramming in what they've been doing before," Schwartz said. "So in the beginning, many will try to create websites that strongly resemble the printed newspaper before learning how to use various technologies better and more effectively."

"The realistic view is that there might not be one way that works for the industry," he said. "Publishers are a diverse set; they all have their own agendas and ultimately it's up to them to create strategies and appropriate technologies to use."

Schwartz says that at this point in time, most newspapers are experimenting with a variety of technologies and will eventually settle into a few strategies that work for both budgetary and staff restrictions and audience acceptance.

"A lot of papers are scrambling because once they have any type of technology, they'll need to populate and produce more content for people to look at," he said. "Coming to terms with what works best for them will make the transition to Web a lot more manageable."

The *Dothan Eagle* is owned by Media General, which provides overall format and design for its newspaper websites. The *Dothan Eagle* provides all the content for the site, and managing editor Ken Tuck says the readership for the website is about 1.6 million page views per month.

Tuck said they quickly realized newspapers have two different audiences – one that continues to love the print product, and another that gets everything online. They try to present the same content in different forms to appeal to as many people as possible.

"Almost all our content is shared in one form or another," he said. "We really dominate the website with breaking news, and we continually update it throughout the day and then follow it up the next day in the newspaper with more in-depth information."

Regardless of whether they are targeting readership for online or print editions, Tuck says the goal is one and the same – focusing on local news. Whether online readers are coming to the website from down the street or halfway around the world, Tuck said their local content "hits them right in the face."

"People have tons of options for national and international news, but when it comes to local news, nobody can cover it like a local newspaper," he said.

Tuck says the *Eagle* puts a lot of emphasis on promoting its website from its print edition. Online extras, like videos or long documents, are teased to from the print story, and they have standing house ads and promos within the newspaper itself.

"If we see something unusual around town, we might have a story in the paper but then do something fun online," he said. "For example, during tax season, small tax companies have people dancing outside their buildings on costume. One reporter covered the story, then wore a costume and danced around for a video that we posted as an extra on the website."

The *Dothan Eagle* also places heavy importance on their social media networking. Their main tools are Facebook and Twitter, and Tuck said these are huge assets to the organization.

"An amazing number of people come to us through Facebook," Tuck said. "A lot of people go to Facebook first, and if that's where they get their news from we have to adapt to this to supply it to them."

Tuck said they have one person during the day and one person at night in charge of maintaining the social media presence, but online and social media components are so important that manpower can be increased if necessary. He cited a recent example: in early March, severe weather descended on Dothan. The newspaper staff galvanized, assigning one person to send out text messages with weather alerts, one to update the website, and one to keep their social media accounts current.

The *Mining Journal* is owned by Ogden Newspapers, Inc., a Wheeling, Va.-based family-owned chain, which managing editor Bud Sargent says heavily regulates its

website. Websites for the *Mining Journal* and other Ogden holdings all have the same format, with little control in terms of presentation or content.

Sargent says their website, which has been around since 1996, gets over 100,000 unique visitors and upwards of 1.5 million page views, and while the highest percentage of visitors comes from their immediate circulation area, Sargent says they have had visitors from every continent.

"It's a huge question of crossover," he said. "Some people getting the paper are looking at the website, sometimes it's people who used to live here or went to school here and want to keep track of what's going on in Marquette … it's never clear-cut exactly who it is."

The *Mining Journal* employs 16 people in the newsroom, but the organization's webmaster is in charge of uploading content. The majority of news appears in both media.

"As far as posting material goes, there's no mindset in terms of planning as far as 'this we'll put on the Web but not in the print edition,' or vice versa," Sargent said. "About 75 percent of what appears in print is also online, and most of what's on the website has been or will be in print as well."

The *Newberg Graphic* is owned by Eagle Newspapers, a group based in Keizer, Ore. The newspaper was designed in-house until a few years ago, and then the *Newberg Graphic* went to an outside website building company called Eye Focus for a more professional design.

Allen says the print news is categorized and then certain categories (like sports and business stories) are also published online. The highlights of the paper go online,

and some general news gets left out. The *Newberg Graphic* is published twice weekly. The Wednesday newspaper is the larger edition, and about 70 percent of that content goes online. Allen estimated that about 80 percent of the shorter Sunday edition goes online.

The *Newberg Graphic* employs 12 people, but Allen himself is in charge of all the news on the website. In such a small newspaper, he said, resources are limited and it is just impossible to staff every area as fully as he would like. As such, he says there is not much debate over what goes onto the website.

"We just upload news that's in the paper and let people decide what they want to read," he said. "Given our staff size, it's about all we can do."

Schwartz anticipates more and more newspapers implementing paywalls in the next year, in an attempt to bring in some revenue from their product.

"The biggest trend in the last 6 months is that newspapers are shifting toward creating paywalls," Schwartz said. "There are so many different ways to execute a pay system, so it's time for papers to experiment and find a workable model."

All content on the eight newspaper websites analyzed is offered for free; *Dothan Eagle* editor Ken Tuck said that for him, this was a corporate decision, but he much prefers it over a paywall system.

"There's a mentality that online news should be free," he said. "People have been getting free online news for years, and when it comes to actually paying to access information online, they just keep searching."

However, changes are in the works.

The *Mining Journal*'s website is preparing to undergo a transformation – Ogden Publishing is currently in the process of considering different models to put in a paywall

system. Editor Bud Sargent says that while *Mining* Journal employees have been asked

for their input on the decision, ultimately the choices will be made by their corporate

owners. No firm decisions have been made, but he expects a new system to be in place in

the next 6-12 months.

Sargent says he is pleased with the current website, but he feels changes could be

beneficial.

"We shouldn't charge for every last thing on the Web, and most newspapers don't

do that, but I believe we should identify and market specific items on the website," he

said. "It's easy to say that we'll just start changing things, but if we have 100,000 unique

visitors a month coming to the website and the number suddenly drops to 70,000, that

will influence national ad buys. That one decision has significant proprietary

implications."

Newberg Graphic editor Allen says most content is published in both the print

and online publications, but currently the print product is more encompassing. However,

the company is turning to a paywall system in the next few months, which will ultimately

change the amount of content offered online. The details of the new system are still

unclear, but Allen says the plan is to put most news content behind the paywall but keep

some advertising content free for all readers.

When asked why the website currently offers free content, Allen said they were

following the trend of what other newspapers were doing when they began the website

around eight years ago.

"Everybody else was giving it away for free, so we started doing that as well," he

said, "but now we've figured that's not going to work long-term."

Though most journalistic research and speculation seems to point to a future in online and interactive news, Allen says this isn't a guarantee. Some newspapers have taken the view that websites drive readers away from the profitable printed newspapers, and have gone as far as eliminating their websites, he said.

"Young people have grown up expecting all this for free, but advertisers don't want to pay a living wage to publishing companies to put ads on Web pages," he said. "At some point, someone has to pay for everything and Web pages are just not generating enough revenue."

This is certainly not an easy conversation to have, but it is one that newspapers must take a hard look at.

"This discussion is happening at newspapers all over the planet: what should go for free, what we should charge for, how much we should charge for it, how we can present it, will a paywall cause people to stop coming to the website, would it affect national ad buys, etc.," Sargent said. "If it were easy, it would have been decided a long time ago."

Limitations

While intensive study of these eight newspapers will surely add to the body of evidence regarding community newspapers and their use of the Internet, it is unlikely, even impossible, that the selected sample represented all the strategies community newspapers use for making news available to their readers. Further study on a much larger scale is necessary to confirm or contradict the findings. In addition, this study was limited by its small sample size and relatively short research period.

It should also be noted that the theories regarding the Internet and geographic area are generally several years old; technology advances so quickly that even a few years could make research outdated. It is difficult for academia to keep up with this rapid pace, and thus the only available literature to analyze was older and potentially out-of-date. In addition, existing research focuses primarily on the Internet as a computer-based technology, but now we must begin to consider the concept of the "Web" – an extremely mobile technology that includes dial-up, broadband, and wireless Internet, as well as 3G and Long Term Evolution (LTE) technologies accessible on cell phones and other mobile devices. As such high-speed technology can be accessed through mobile devices and therefore reaches people regardless of geography, restrictions on access to content will be drastically reduced and older theories could become obsolete.

While each newspaper plays a similar role in its community, the weekly newspapers were more likely to include increased amounts of "soft news" (e.g. arts and entertainment coverage, community calendars, etc.), which could affect the data collected. In addition, the timing of this study included several events that caused more coverage of certain areas. The last weekend of research coincided with Super Bowl weekend, which could have skewed the data in terms of sports and/or feature articles included, particularly in the larger newspapers running more wire stories, and an unusually large blizzard in February affected most areas around the country and could have raised the average number of local and/or weather stories.

Several of the newspapers also focused on local weather and activities (e.g. *Boulder Weekly*'s website coverage of local skiing conditions, the *Mining Journal*'s print series "Winter Wanderland," and the *Delaware Wave*'s focus on the local surf culture and

ocean conditions), which will vary as seasons change. The Feb. 10 issue of the *Missoula Independent* was dedicated to pre-coverage of the Big Sky Film Festival, which could have also skewed data gathered. These events all had the potential to affect the type of data gathered, but it is important to remember that this is also definitive of the nature of news reporting.

The *Daily Advertiser*'s website design changed significantly soon after this research was conducted. This may have had some effect on the way content was presented toward the end of the old design's run.

It is also important to recognize the potential slant heralded by the restrictions in size imposed by this study; as defined by the parameters of this study, all newspapers selected were of relatively small size and therefore mostly served smaller circulation areas. The exception was the *Dothan Eagle*, which served as the main daily newspaper for a metropolitan area in Alabama. These findings do not reflect strategies utilized by all newspapers, just those within the size parameters.

It is also possible that geographic differences also affected content type, as resources such as high-speed Internet vary widely in urban and rural communities and have the potential to greatly affect patronage of the newspaper's website.

The timely nature of this research means that the findings are extremely relevant at this time; however, given the amazing speed at which technology advances, further research will need to be conducted to keep this topic relevant.

Possibilities for Future Research

The small sample size of this study means that not all strategies of news dissemination could be represented. Further research should encompass more news

organizations to get a fuller understanding of the different options newspapers can use to present their content.

Another possibility for future research could focus on analysis of the entire newspaper website; that is, going deeper than just the newspaper homepage. There are many other aspects of a newspaper website (e.g. archives) that could not be analyzed due to the scope and relatively short research period of this project. Thus, further research should reflect the broader scale of strategies used by community newspapers. The newspaper industry is currently undergoing a great shift; further research should represent strategies and tactics used at a time when the profession is on more stable ground.

Future studies could also include entire newspaper websites compared to entire printed copies. This method of research would more accurately describe the differences between the amounts of content offered, but was not possible due to the time constraints and scope of this research. In addition, teases and indexes in the print editions were not counted, but adding another content category could include these types and therefore provide a more extensive picture of the publications. Analysis of number and type of advertisements could also add to the body of research on community newspapers and their websites.

This research divided authors into staff and non-staff categories, but this could be further broken down to reflect whether content is produced locally or non-locally. Consideration of such factors could attempt to reflect how much content is syndicated and how much is unique to the publication in question.

In terms of reader comments, analysis of the number of participating readers in addition to a simple count would give a deeper understanding of the nature of such technology and how truly interactive it is. In addition, letters to the editor could be classified as the print version of a website's comment section, and such a distinction could be coded for in the future.

It appears that social construction of technology theory was the most relevant to this study, and further research should attempt to integrate specific technological advances into this theory. As technological advances such as e-readers and iPads become more prevalent and high-speed Internet becomes more readily available in rural areas, it is likely that the content of printed newspapers and newspaper websites will change. Further research should be conducted analyzing differences in content and presentation, taking into account iPad apps and the structure of mobile news options. It is also certain that new technology will emerge, and it will become necessary to analyze new tools that either are not yet widely used or do not exist at this time.

Beyond analyzing newspaper content, future research could focus on audience response to strategies publications are using. Study of amounts and types of content is important, but it is also necessary to consider whether audiences are embracing, avoiding or ignoring various content.

Appendix I

Community, Newspaper and Website Descriptions

Dothan Eagle
Dothan, Ala., circulation 33,592

Community Characteristics

The 2010 census recognized 65,496 people in Dothan. Racial makeup was 63.1 percent Caucasian, 32.5 percent African American, 2.9 percent Hispanic or Latino, 1.1 percent Asian, and less than one percent each Native American and Pacific Islander. The median age in Dothan was 37 years, and the male-to-female ratio was 88:100.

The most recent information for more specific demographic information was the 2000 census. According to these documents, the median household income was $35,000, with a median family income of $45,025. Approximately 12.7 percent of families and 15.6 percent of the entire population were at or below the poverty line. Nearly 80 percent of residents earned a high school diploma and about 23 percent completed college, with eight percent of residents holding a graduate or professional degree. The unemployment rate in Dothan was 6 percent.

The two largest employers in the Dothan area were in the medical field: Southeast Alabama Medical Center and Flowers Hospital. Other significant businesses included agriculture (specifically peanut, cotton, and tomato production), aerospace, distribution, retail, and technology. The cost of living was among the lowest in the U.S., and in 2006 it was named the country's cheapest city to live in by *US News and World Report*. Violent crime was well below the national average, but property crime rates were slightly above the national average.

Newspaper Characteristics

Figure 4 *Dothan Eagle* Newspaper Flag

The *Dothan Eagle* is owned by Media General and has partnerships with other regional media including *Dothan Progress, Enterprise Ledger, Jackson County Floridian, Eufaula Tribune, Opelika-Auburn News,* WRBL, and Alabama's 13. It is the dominant daily newspaper for the 13-county area known as the Wiregrass Region in southeast Alabama and segments of northwest Florida and southwest Georgia, making it one of the broadest-reaching newspaper analyzed in this research. Other cities in the region include Alabama cities Enterprise, Eufaula, Ozark, and Troy; Georgia cities

Albany, Americus, Cordele, Fitzgerald, Thomasville, Moultrie, Tifton, and Valdosta; and Florida cities Marianna and Tallahassee. The newspaper is printed in Dothan, Ala., which is the self-described "financial, retail, recreation and industrial hub of the Wiregrass market area." The newspaper boasts a readership of 38,000 during the week and 40,000 on Sundays.

The *Dothan Eagle* is a two-section (news and sports) daily broadsheet newspaper, with two additional sections ("Accent" and "Nation & World") on Wednesdays and Sundays. The Wednesday newspaper also includes an "Our Town" page that includes local news such as fundraisers, military happenings, promotions, pictures, and other various community news. The Monday edition includes a "Chalk Talk" page dedicated to local education news.

Website Characteristics

Figure 5 *Dothan Eagle* Website Flag

The *Dothan Eagle'*s website features a small flag on the top left corner, which is right next to a banner ad that takes into account each user's cookies (see Figure 5). The home page features five ads located at the top, bottom, and right side of the page. Above these features are links directing users to place ads, subscribe to the print edition, login to the website, register for Web membership, contact the staff, and view newsroom and circulation information.

Just below the flag and banner ad is a navigation bar with tabs for news, sports, entertainment, lifestyles, weather, video, services, classifieds, real estate, shopping/deals, jobs, newspaper ads, and autos sections. Each tab separates into more specific sections in drop-down format (i.e. appearing when a mouse hovers over the link). Below this is a rotating centerpiece that alternates between the day's top news and sports stories – both sections feature a story and a prominent photo, with links to five other top stories of the day.

The day's 10 most recent stories are grouped together in a "from the Continuous News Desk" segment; this section is updated throughout the day. Next to this section is a list of the five most commented-on stories. A local weather map is also prominently displayed on the home page, with the option of searching weather forecasts by zip code.

In the middle of the home page is a banner promoting the newspaper's various technological options – text alerts, RSS feeds, e-mail updates, mobile apps, and online forms for subscriptions, obituaries, and classified ads. Just below this is a banner that features popular stories or features; the banner rotates through six features, showing three at a time. The newspaper has enabled Facebook recommendations, and the five top-recommended stories are shown. These stories are only accessible for users logged into a Facebook account. The page also showcases a local video and three AP videos, as well

as a map describing local crime statistics. One box alternates between the five top-viewed and top-commented-on stories.

The website features five links in each of the following categories – local news, sports, lifestyles, opinion, and Alabama, with a varying number of links under an "Offbeat News" heading. Stories can be categorized in many areas, so repetition is common. Three upcoming community calendar events are showcased at the very bottom of the page. There are also options to register with the website and to login; creating an account allows the user to comment on features, but all content is the same.

Journal Tribune
Biddeford, Maine. Circulation 8,415

Community Characteristics

The most recent official information for Biddeford was the 2000 census, which reported 20,942 people in the city. Racial makeup was 96.6 percent white and less than one percent each African American, Native American, Asian, Hispanic, and Pacific Islander. The median age was 36, and the male-to-female ratio was 88:100. The household median income was $37,164, and median family income was $44,109. Approximately 8.6 percent of families and 13.8 percent of the population were at or below the poverty line. Biddeford is the home of Maine's only medical school at the University of New England.

Newspaper Characteristics

Figure 6 *Journal Tribune* Newspaper Flag

Today's *Journal Tribune* (circulation 8,415) is the result of an 1880 merger of two weekly political publications – the *Union* and the *Eastern Journal*, both dating from the mid-1800s. It was turned into a daily publication in 1884. Ownership of the newspaper changed hands several times until 1997, when Beacon Press, Inc. acquired it.

The *Journal Tribune* is a broadsheet newspaper with two sections, news and sports. Standing page topics include local, community, state/region, and world/nation. There is a narrow banner ad stripped above the flag on the front page, and designers are not afraid to use colors when creating centerpieces. (For example, one centerpiece feature included a photo and a story layered over a pink background.)

Figure 7 *Journal Tribune* **Website Flag**

  The *Journal Tribune* website differed significantly from the other websites analyzed. It featured a large full-screen-width flag, which ran into a navigation bar with tabs for the homepage, news, editorial, sports, weather, classifieds, community, yellow pages, and death notices (see Figure 7). There were also smaller links for direct access to subscriptions, advertising, general information ("About"), contact, obituaries, and online forums. The website is organized into boxes, each of which features one story. One news story, one sports story and one editorial feature are shown at the top of the page, and these options are updated daily. Just below these stories is a list teasing that day's print stories – when users clicks on these links, they are directed to a page with subscription information. A few "Most Popular" and "Most E-mailed" stories are visible behind labeled tabs.

  Farther down the page, boxes also showcase recent deaths in the community, a column, and online features (the online features are not changed often). At the bottom of the page are standing headings for recent photo galleries and online polls, which sometimes do and sometimes do not contain content, and an interactive graphic leading to stock market information. There are also options for RSS feeds and a daily e-mail with local headlines, as well as story-sharing via Facebook, Google, technorati, ReddIt, NewsVine, dig and del.icio.us. The home page features five advertisements and a small icon with the day's weather forecast. One unique addition is the downloadable "extras" section, which includes PDFs of classifieds and other special sections. These extra offerings vary from day to day.

Mining Journal
Marquette, Mich. Circulation 18,000

Community Characteristics
  The most recent information for Marquette was the 2000 census, which counted 19,661 people in the city. Racial makeup was 95 percent Caucasian, 1.7 percent Native American and less than 1 percent each African American, Asian, Pacific Islander, and Hispanic.

  The median age was 31 and the male-to-female ratio was 94:100. Median household incomes were $29,918 and the median family income was $48,120. Seven percent of families and 17 percent of the population were at or below the poverty line.

The largest employers in Marquette were the Marquette School System, Marquette General Hospital, and Marquette Branch Prison.

Newspaper Characteristics

Figure 8 The *Mining Journal* Newspaper Flag

The *Mining Journal* is owned by Ogden Newspapers, Inc. Circulation is 18,000 daily and 30,000 on Sundays. At just over 4 inches tall, the flag is very tall compared to the other newspapers analyzed. It includes not only the newspaper name, price, and publication date, but also pictures and refers to stories inside the paper.

The daily newspaper includes news and sports sections, plus special sections on various days throughout the week: "Boomers & Beyond" (news about and targeted toward the baby-boomer generation), "Learning" (education news), "Your Money" (business and financial news), "Health," "Outdoors," "Our Youth" (news about youngsters and sometimes education), "Together" (engagement and wedding announcements), "Automotive" (car classifieds), and a Saturday church page. On Mondays, a weekly entertainment and local event magazine is included with each paper.

A few unique offerings in the newspaper included "Superiorland Yesterdays," a today-in-history-type feature, and a weekend "Gas Gauge" with information about gas prices around the state. Stories often included an "Up Next" pullout with time/date/place information for events or an "On the Net" pullout with a Web address for further reading. Designers occasionally included graphics referring readers to a video on the newspaper's website, and a specific "Etcetera" section corralled story jumps. A seasonal feature known as "Winter Wanderland" also appears in the newspaper during the winter months, highlighting various winter sports and activities community members partake in. Press releases and briefs are organized in local, state, and national sections.

Figure 9 The *Mining Journal* Website Flag

The top of the page features small links allowing users to sign in, create an account, subscribe, submit news, visit affiliated sites, or go to the home page. Creating an account allows users to comment on news items, but all content is the same regardless of whether a reader has an account. The *Mining Journal*'s website features a small flag in the upper left corner flush with a wider banner ad (see Figure 9). Near the top of the page is a small local weather forecast. Just below the flag is a toolbar with tabs for news, sports, opinion, polls, features, sections, extras, ads, classified ads, jobs, contact information, services, and a second, more general contact tab. A small centerpiece features a photo with a local news story, and five links teasing to that day's print front-page stories are featured near the top of the page. If there is breaking news (which did not happen during the four weeks this website was analyzed), it is displayed in a strip below the navigation bar and above the centerpiece.

Continuing down the page in a column are five links in each of the following categories: area-region, community, obituaries, spotlight (popular news), local sports, scoreboard (sports), and living green. A "Student of the Week" feature appears, as do the most-commented-on story and the six most-read stories. There are standing headers for the latest photo galleries and videos, but video content appeared during the course of this research. The website has a relationship with *Parade*, and several links from that week's magazine appear at the bottom of the page.

The last six links on the page are community calendar events, and the page features five advertisements, several house ads, and icons for subscribing or submitting news to the paper. There are also icons to lead readers to popular sections such as restaurant menu guides. The *Mining Journal* has Facebook and Twitter accounts, and it offers podcasts, local coupons, and PDFs of the day's front page.

Daily Advertiser
Lafayette, La. Circulation 45,400
Community Characteristics

Lafayette is the cultural center of a southern Louisiana region known as Acadiana. The 2000 census was the most recent source of official information, and it cited the population of Lafayette as 110,257. However, the metropolitan area of Acadiana includes more than 450,000 people. The median age was 32 years, and the male-to-female ratio was 90:100.

Racial makeup was 68 percent Caucasian, 28 percent African American, 1.4 percent Asian, and less than one percent each Native American, Pacific Islander, and

Hispanic. Lafayette is the center of the Cajun culture in the U.S., with 11.5 percent of the population speaking French or Cajun. The unique cultural focuses bring a strong tourism industry to the area.

The median household income was $35,548, and the median family income was $47,783. About 11.6 percent of families and 16.3 percent of the population were at or below the poverty line.

Newspaper Characteristics

Figure 10 *Daily Advertiser* Newspaper Flag

The *Daily Advertiser* began publishing in September 1865 as a bilingual English-French weekly. Gannett bought the newspaper in 2000.

Each newspaper has at least two sections (news and sports), with two additional sections ("Growth & Business" and "Accent") in the Wednesday and Thursday editions. The Friday newspaper features a religion page, and the Sunday edition includes multiple pages dedicated to engagement, wedding, and anniversary notices. All editions include sections for local news, police and fire reports, and obituaries.
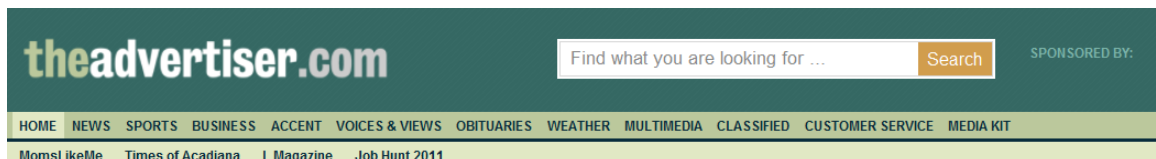
Website Characteristics

Figure 11 *Daily Advertiser* Website Flag

The *Daily Advertiser* website begins with a flag on the left side and a search bar on the right side (see Figure 11). The navigation bar is divided into the following tabs: home, news, sports, business, "Accent," "Voices & Views," obituaries, weather, multimedia, classifieds, customer service, and media kits. Below the navigation bar are links to options for mobile, news feeds, e-newsletters, text alerts, and Twitter, and below these are a small flag and a search bar.

Social media applications involve Facebook, RSS feeds Twitter, e-mail, mobile options, and SMS messaging for cell phones. One top sports story and two top news stories and pictures are featured in a rotating centerpiece, and next to the centerpiece appear the newest story and newest picture, followed by seven more links from the continuous news desk. Six photo galleries are featured near the top of the page.

A bar near the middle of the page features three links to top features or photo galleries, and below this is a reader-submitted section that includes a reader photo and top news stories, forum topics, and blog posts; more reader-submitted content appears lower on the page. The newspaper produces video clips, and one clip is featured along with three other videos. Below this, one entire screen is devoted to free local and grocery coupons and then options for classified car, job, home, and apartment ads. Five recent photo galleries, including wedding and engagement announcements, appear. Stories are organized into news, sports, growth and business, opinion, accent, and entertainment, with one feature story and photo appearing next to four other links.

There are 10 links each for local and nation/world news from *USA Today* and the Associated Press that appear at the bottom of the page next to links for customer service options such as subscribing, paying bills, reporting delivery problems, stopping or starting vacation delivery options, placing classified ads, and contacting the staff.   There are direct links to the past seven days' news stories, and 15-20 ads appear on the home page each day in varying sizes and placements.

The *Daily Advertiser* featured the most links out of all the newspapers analyzed. Most articles featured dozens of linked words and phrases that opened Bing searches, and hovering a mouse over these links opened a floating ad that blocked part of the story. Many articles jumped to second or third pages, and first-time readers had to fill out a short survey of basic demographic information for analytical purposes.

The *Daily Advertiser* website's format changed soon after this research was conducted, but representatives from the newspaper did not comment on the changes.

Boulder Weekly
Boulder, Colo. Circulation 35,000
Community Characteristics

The most recent information for Boulder was the 2000 census, which counted 94,673 people in the city. Racial makeup was 88 percent Caucasian, 1 percent African American, 4 percent Asian, 9 percent Hispanic, and less than one percent each Native American and Pacific Islander. The median age in Boulder was 29, thought to be due to the large population of college students, and the male-to-female ratio is 106:100. The cost of living in Boulder is relatively high, but median salaries are higher as well. The median household income was $50,209, and the median family income was $85,807. Six percent of families are at or below the poverty line.

Boulder is home of the state's largest university, the University of Colorado at Boulder, and is known for its liberal politics. The city has been nominated for spots on the top 10 lists for Top Brainiest Cities, Best U.S. Cities, Top 100 Places to Live, Healthiest Towns in the U.S., Most Bicycle Friendly Cities in the World, Top 10 Cities for Artists, Lesser-Known LGBT Family-Friendly Cities, and America's Foodiest Town, and was ranked as the number one most educated city in America (69 percent of the population holds a bachelor's degree or higher educational degree).

Figure 12 *Boulder Weekly* Newspaper Flag

The *Boulder Weekly* describes itself as "Boulder County's true independent voice." The independently owned paper is distributed free every week, and its mission statement declares itself proud of its comprehensive arts and entertainment coverage. The newspaper is issued at multiple locations around Boulder, and is also available in PDF format on its website.

Boulder Weekly is a tabloid newspaper with covers that resemble traditional magazine design closer than those of newspapers. The flag is consistent in type and placement, but colors vary according to the rest of the cover (see Figure 12). Color is abundant on every page, and design elements appear more whimsical than serious news-style.

News is mostly focused toward arts and entertainment, and pages are dedicated to the following topics: news, briefs (called "icumi" – "In Case You Missed It"), arts and culture, "Overtones" (music and movie reviews), "Panorama" (a calendar of arts and entertainment events), "Elevation" (focusing on outdoor sports), upcoming events, a theater section including movie reviews and theater schedules, a cuisine section including restaurant reviews, a weekly recipe and food briefs, wellness news, and astrology.

Website Characteristics

Figure 13 *Boulder Weekly* Website Flag

Boulder Weekly offers PDF versions of the printed edition every week, as well as a free digital archive with past issues. The default is to view the PDF online, and there is also the option of downloading files. The website begins with a small flag next to a wider banner ad (see Figure 13). The navigation bar is organized into home, news, views, "Buzz," Screen," cuisine, health, blogs, extras, special sections, archives, info and

advertising, and classifieds tabs. Registering for the website allows commenting on stories, but otherwise does not affect the type or amount of content offered. Five top stories with photos revolve in a rotating centerpiece, and the six most recent stories appear next. Following these top features are five news links, an opinion piece, a video of the day, and five blog postings.

Five links appear in each of the following topics: recent news, top views, briefs, national, world, entertainment, tech, and "Most-Read." The most-read list is the default, with the option of switching to most-commented-on and most e-mailed stories. The cover story from the print edition is featured, as is the latest music or movie review. Some music, art, movies, food, and performance features appear, as does the top arts and culture story. Low on the page, the website features the cover stories from the past three printed editions.

Each online article has direct links to other stories in the section or by the author. The newspaper has accounts on Facebook and Twitter, and it offers RSS feeds and e-mail alerts as well. Because the Boulder area is big on winter sports, there are two features on mountain sports, as well as weather and snow conditions for the 20 main ski areas in Colorado.

Delaware Wave
Salisbury, Md. Circulation 22,000
Community Characteristics

The *Delaware Wave* is a weekly newspaper targeting readers in Salisbury as well as Delaware towns Bethany Beach, Clarksville, Dagsboro, Fenwick Island, Frankford, Georgetown, Millville, Millsboro, Ocean View, Omar, Roxana, Selbyville, and South Bethany. These are all smallish resort towns, and their close proximity means the newspaper is distributed broadly throughout the region.

Salisbury is the hub of an area known as the Salisbury-Ocean Pines Combined Statistical Area, which includes the Salisbury metro area as well as the Ocean Pines metro area. According to the 2000 census, the most recent official data, there were 155,934 people in the combined area. The 2000 census counted 23,743 people in the city of Salisbury. The racial makeup was 60.1 percent Caucasian, 32.3 percent African American, 3.2 percent Asian, 3.4 percent Hispanic, and less than 1 percent each Native American and Pacific Islander.

The median age was 29 years, and the male-to-female ratio was 87:100. The median household income was $29,191, and the median family income was $35,527. Approximately 15.5 percent of families and 23.8 percent of the population were at or below the poverty line. Perdue Farms, a multi-national poultry corporation, is headquartered in Salisbury. Other leading industries are electronic component manufacturing, pharmaceuticals, shipbuilding, and agriculture.

Newspaper Characteristics

Figure 14 *Delaware Wave* **Newspaper Flag**

The *Delaware Wave* is a Gannett paper and is part of the Delmarva Media Group. Other publications in the group include the *Chincoteague Beacon,* the *Delaware Coast Press*, the *Eastern Shore News*, the *Ocean Pines Independent,* the *Somerset Herald,* the *Daily Times,* and the *Worcester County Times*. Several articles appearing in the *Delaware Wave* are written by *Daily Times* employees.

The *Delaware Wave* is a tabloid paper that runs anywhere from 50-70 pages. Two ads appear on the bottom of the front page, and one of the four issues analyzed had a stick-on ad partially covering the main picture. The small size of the paper means that most inside stories jump, instead of the traditional newspaper format of mostly jumping front-page stories. The flag includes a refer to the online edition, effectively cross-promoting the product (see Figure 14).

There are sections dedicated to news, sports, weather, opinion, health, education, "Shorelife" (local/community news), "Resort Living and Homes" (which highlights the community's tourism industry), "Socials" (six women from six nearby communities briefing readers on recent happenings), "Flash!" (a photo gallery), a calendar of events, a week in review (a compilation of briefs about recent events), a surf report (dedicated to ocean conditions and the area's surf culture), and area deaths (a list of death notices but no full obituaries). There is no page dedicated to religious news, but religious stories occasionally appear in the newspaper, and one full page contains ads and a schedule for local churches.
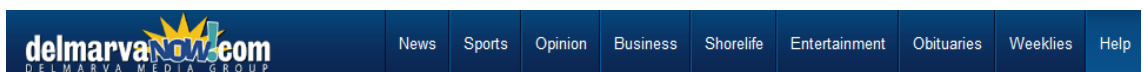
Website Characteristics

Figure 15 *Delaware Wave* **Website Flag**

The site features four large ads – two banner ads are stripped across the top and bottom of the home page, and there are two rectangular ads on the right side. The top banner ad is powered by the individual user's cookies in attempt to personalize

advertisements. A small flag appears next to a search bar powered by momslikeme.com, and just below this is a navigation bar divided into home, news, sports, opinion, business, "Shorelife," entertainment, video, obituaries, "Other Weekly Papers" (links to other publications owned by the Delmarva Media Group), weather, classifieds, and customer service. Small links direct users to mobile options, news feeds, e-newsletters, an e-edition, and ads dealing with jobs, cars, real estate, apartments, deals, dating, and classifieds. There is also the option to log in to participate in forums, comment on stories, post blog entries, and share photos.

A column on the left side of the screen has a small icon describing local weather conditions, as well as two recent photo galleries, a webcam for surf conditions, and a large icon directing users to the *Delaware Wave*'s Facebook page. A small centerpiece in the middle of the page showcases a photo and a story, with up to 25 other news links below it. The 15 most recent stories are showcased directly to the right of the centerpiece, and the four most recent blog postings (written by community members) are directly below the latest headlines.

The site is organized with a tall ad spanning down more than one screen height, and directly below the centerpiece are local obituaries, one opinion piece with links to letters to the editor and the grapevine (reader-submitted reactions to current and community events). An education article with a link to the school lunch menu, a business story with a link to a weekly column written by a community human resources representative, a sports story with links to other top sports stories, a sports blog, a surf blog, a surf report, the week's local sports scores, the next week's sports schedule, and a local feature with links to a few other local stories also appear. A box near the middle of the page defaults to the five most recent blog posts, but readers can also click on tabs to access recent photos, videos, forums, and reader-submitted articles.

Missoula Independent
Missoula, Mont. Circulation 22,103
Community Characteristics

The 2000 census was the most recent source of information about Missoula, and it cited 68,876 people in the city and 95,802 people in the metropolitan area. Racial makeup was 93.6 percent Caucasian, 2.4 percent Native American, 1.2 percent Asian, 1.98 percent Hispanic, and less than one percent African American and Pacific Islander.

The median age was 30 years, with a male-to-female ratio of 98:100. The median household income was $40,466, and the median family income was $42,103. About 12 percent of families and 20 percent of the population were at or below the poverty line. Around 40 percent of the 25-or-older population have a bachelor's or advanced college degree. The University of Montana is the area's largest employer, followed by St. Patrick Hospital and Community Medical Center.
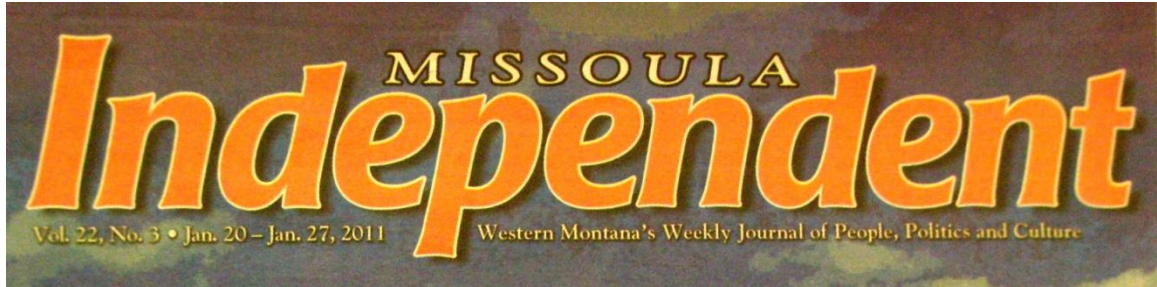
Figure 16 *Missoula Independent* **Newspaper Flag**

     The Missoula *Independent* is distributed free every Thursday in more than 600 locations in western Montana. Owned by Mondo Times, the *Independent* bills itself as offering "a rich, in-depth perspective on our unique life here in the 'Last Best Place."
     The printed newspaper is tabloid-sized and set at 40 pages each week. The flag's font and placement is consistent, but colors vary depending on the rest of the cover (see Figure 16). Content tended to be mostly geared to arts and entertainment, with lots of movie listings and features on local artists and activities. The Feb. 10 issue was a special entertainment issue with pre-coverage of the Big Sky Film Festival. One unique feature of this paper was the absence of jumps; stories continued from one page to the next in a continuous format similar to that of a magazine.
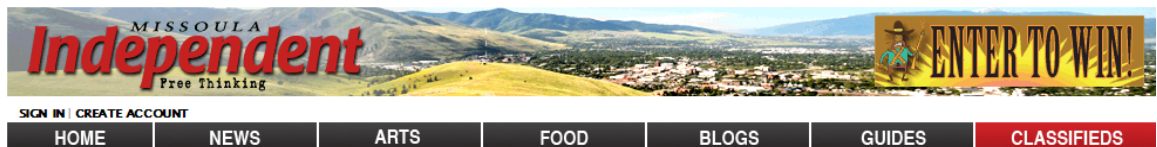
Website Characteristics

Figure 17 *Missoula Independent* **Website Flag**

     The *Missoula Independent*'s website begins with a full-screen-width banner with a small local ad superimposed over it (see Figure 17). The navigation bar is physically larger than the other newspapers analyzed, and is divided into home, news, arts, food, blogs, "Guides," and classifieds tabs. A search bar appears near the top of the page, and users can specify whether they want to search through articles, events, location, movies, or the entire site. A rotating centerpiece features large photos and features one story in news, film, music, and the arts sections. An icon guiding readers to the local weather forecast is prominently featured, as is a box allowing users to search the community calendar for community, movie, music, gallery, performance, book, and family listings. Four recent blogs are featured in a standing area to the right.
     A banner ad runs across the middle of the home page, next to a small house ad promoting the *Independent*'s e-edition. Beneath the ads are three columns. The featured categories are news and arts, and each section has a prominent photo and blurbs for

several articles. A box defaults to the three most recently commented-on stories, but can be changed to the most viewed or e-mailed articles. A food article is sandwiched between several large ads on the right, and on the left are graphics leading to guides published by the *Independent* – The Best of Missoula, Explorer, Feast, Fresh Facts 2010, Homesteader 2010, Parade of Apartments, and Married in Montana.

Each article has links to the latest articles in that section, as well as several ads. Many articles are very long and in-depth, written in more of a magazine style, and photos are interspersed in the text. Articles can span over three or four pages, but there is the option of viewing the whole story on one screen. Social media options include Facebook, Twitter, Digg, del.icio.us, Newsvine and Reddit.

Newberg Graphic
Newberg, Ore. Circulation 4,957
Community Characteristics

According to the most recent available U.S. census data, there were 18,064 people in Newberg in 2000. Racial makeup was 90 percent Caucasian, 1 percent Asian, 11 percent Hispanic, and less than one percent each African American, Native American, and Pacific Islander.

The median age was 30 years, with a male-to-female ratio of 93:100. The median household income was $44,206, and the median family income was $51,084 percent. Around 4 percent of families and 7 percent of the population were at or below the poverty line. Dental equipment manufacturer A-dec was the city's largest employer, followed by George Fox University.

Newspaper Characteristics

Figure 18 *Newberg Graphic* Newspaper Flag

The *Newberg Graphic* is a bi-weekly broadsheet newspaper published on Wednesday and Saturday. The Wednesday edition is two sections; the first with pages dedicated to "Viewpoints" (opinion), sports, schools, business, and arts and leisure, and the second entirely composed of classified ads. The Saturday edition is composed of one section containing pages for opinion, sports, and religion.

Figure 19 *Newberg Graphic* **Website Flag**

      The *Newberg Graphic* is owned by Eagle Newspapers. The publication's flag stretches across the width of the home page, and its position remains constant on all pages of the website (see Figure 19). Directly below this is a navigation bar featuring links to various sections: news (which then separates into several drop-down sections), sports, milestones, obituaries, opinion, classifieds, contact, advertising, archives, photos/videos, and news alerts. The website features a list of the five most-read stories, with the option of switching over to a list of the five most commented-on stories. One article with a photo is prominently featured at the top of the page, sandwiched between two banner ads. These features appear on the home page before scrolling, which would be similar to the "above-the-fold" area on a printed newspaper.

      Scrolling down the home page, three more ads are visible, as are icons promoting the *Newberg Graphic*'s Facebook page and an online business directory for the town. A small gallery showcases the seven more recent photos added to the website, and below this gallery are another four stories. The photos often accompany articles and there is often repetition within the sections.

Appendix II
Coding Sheet

Newspaper Name:

Circulation Category
Under 20,000: enter 1
20,000-50,000: enter 2

Frequency of Publication
Daily: enter 1
Non-daily: enter 2

Headline:

Author:
Staff writer: enter 1
Non-staff writer: enter 2

Date Published:

Entry Topic:
Breaking news: enter 1
Politics/government: enter 2
Crime: enter 3
Health/science: enter 4
Sports: enter 5
Education: enter 6
Lifestyle/feature: enter 7
Arts/entertainment: enter 8
Faith: enter 9
Business: enter 10
Obituary: enter 11
Community/local: enter 12
Editorial: enter 13

Elements Contained:
(Enter the number of times each of the following elements appears in the entry):
1: Story:
2: Photo:
3: Video:
4: Audio slideshow:
5: Graphic:
6: Interactive graphic:
7: Links:
8: Related media:
9: User comments:

Website Characteristics:
(Enter any description about features or offerings on the site, including the presence of advertisements and social media.)

Appendix III
Interview questions

The interview format will be semi-unstructured; that is, all of the questions on this list will be asked, but there is potential for further questioning or explanation based on the interviewee's answers.

Regarding the newspaper in general
Is the newspaper independently or group-owned?

What is the readership for the online paper? (Specifically, what are the unique page views?)

How much of the content is shared between online and print versions, and how much is original to the website?

Regarding the target readership:
What is the population of town/city/county you serve?

What are the common occupations in the area?

Is there something special that draws your readers? (e.g. coverage of a particular sports team)

Do you target different audiences with the print and online editions?

Regarding the publication's website:
What is your strategy/mission for the website? (e.g. reaching new readers, providing original content, keeping up with the industry, etc.)

How do you decide what news goes onto the website and what goes into the newspaper?

What factors go into the decision-making process?

Is your intention to make the print and online versions completely separate publications, or are they connected?

Who manages/oversees your website?

How much of your staff works for the print edition, and how much focuses on the online edition?

Do you have staff hired specifically to work on the website?

How do you promote your website?

How do you promote online advertising? Do you have different strategies for selling
online and print advertising?

Regarding the publication's resources:
What is your staff size?

Does your publication have a relationship with Google?

Are you satisfied with your current online offerings?

How much of your ad revenue comes from print advertising and how much comes from
online advertising?

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