

THE KRUGMAN PARADOX  
NEWSPAPER WEBSITES' INABILITY TO GENERATE ECONOMICALLY  
SUSTAINABLE ADVERTISING REVENUE

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## Dedication

I dedicate this thesis to my mother and father, life-long learners, who never failed to provide me with persistent support in my pursuit of learning.

## Acknowledgments

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To my family and friends and the professors and colleagues who have supported me in different ways throughout my graduate study: Thank you.

## Abstract of Thesis

This thesis paper is focused on investigating the economic feasibility of general information news sites owned and operated by newspaper organizations. In particular, this thesis seeks to explore a phenomenon I call The Krugman Paradox, which states that regardless of audience reach, general interest newspaper websites cannot generate an economically sustainable advertising revenue stream. The goal is to help newspaper owners better realize the economics of generating sustainable online advertising revenue in the new Internet paradigm.

The paper begins with a brief background of newspapers, the Internet, and Internet advertising. The state of the art focuses on the economic performance of newspapers, news sites, online audience, and online advertising. Much of the online data for newspapers spans a time period from 2003 to 2008. Information is sourced from financial statements, industry data, industry analysts, and media pundits. Academic investigations into the economic performance of the newspaper industry were found to be few and far between, but were cited where appropriate.

Conclusions are drawn from the included data. Conclusions reveal that to date, there is not one single general news website that is economically sustainable. The findings in this thesis support the phenomenon known as The Krugman Paradox, which states that regardless of audience reach, general interest newspaper websites cannot generate an economically sustainable advertising revenue stream. Future research regarding the

findings of this thesis should explore new revenue streams and new publishing techniques to generate sufficient revenues to maintain and grow operations.

## Table of Contents

Dedication	iii
Acknowledgements	iv
Abstract of Thesis	v
Table of Contents	vii
List of Figures	viii
List of Tables	ix
Glossary of Terms	x
Chapter 1: Introduction	1
Chapter 2: A Brief Review of Newspapers Transition to the Internet	3
Chapter 3: State of the Art	
3.1 Newspapers	8
3.2 Advertising	15
3.3 Site Economics	22
Chapter 4: Research Question	
4.1 Is The Krugman Paradox Real?	29
4.2 Justification	29
4.3 Discussion	31
Chapter 5: Problem Resolution	32
Chapter 6: Conclusions	
6.1 Conclusions	34
6.2 Summary of Contributions	35
6.3 Future Research	36
References:	37
Appendices:	41

## List of Figures

Figure 1.....	3
Figure 2.....	6
Figure 3.....	7
Figure 4.....	11
Figure 5.....	12
Figure 6.....	14
Figure 7.....	19
Figure 8.....	20
Figure 9.....	27
Figure 10.....	28



List of Tables

Table 1.....1  
Table 2.....2  
Table 3.....3

## Glossary of Terms

CPM: is frequently used in advertising to represent cost per thousand (where M is the roman numeral of 1000). When used in online advertising it relates to the cost per thousand page impressions.

Economic Sustainability: Having a mechanism in place for generating, or gaining access to, the economic resources necessary to keeping the business operating on an ongoing basis.

Krugman Paradox, The: states that regardless of online audience reach, general interest newspaper websites cannot generate an economically sustainable advertising revenue stream. The term got its name from Robert Ivan after a situation where a PetMeds.com advertisement ran for three days beside New York Times editorial columnist Paul Krugman's articles. This after the fact that Krugman had just been named winner of a Nobel Memorial Prize in Economic Sciences. See Figure 9

Newshole: is the amount of content a news provider needs to create in every publishing cycle

## **Chapter 1: Introduction**

The Krugman Paradox states that regardless of online audience reach, general interest newspaper websites cannot generate an economically sustainable advertising revenue stream. Big or small, for profit or nonprofit, new or old, this paper will reveal that, to date, there exists no economically sustainable newspaper website. Hence, the main purpose of this dissertation study is to introduce the paradox and defend its claim.

On the basis of a comprehensive literature review, the analysis of recent research revealed flaws in assumptions about how Internet advertising revenues would perform by offsetting falling print advertising revenues. The historic decline in newspaper print circulation as well as minimal increase in online advertising revenue now poses a major threat to the 50 billion dollar American newspaper industry. To date, the newspaper business model has been to grow online audiences in the hopes that those revenue streams will offset the historic print revenue losses from their declining core product. The analysis contained herein does not concern itself with the question of “how will journalism get done” but rather seeks to answer the question of whether a sustainable business model for a general news site can exist in the new Internet paradigm.

Analysis of The Krugman Paradox also seeks to answer the question, is pursuing audience growth strategies to generate economically sustainable revenue possible? There has been no such in-depth prior study as it relates to the viability of the newspaper industry.

Acceptance of the paradox will cause newspapers to rethink their primary online revenue stream and indeed their entire business model.

The following section will provide a brief review of the newspaper industry and its performance transitioning to the Internet. The state of the art is explored in chapter three through relevant literature related to the two primary data points explored in this thesis, audience reach and advertising revenue. Chapter four will offer a theoretical framework for The Krugman Paradox and propose hypotheses based on that framework and on previous research. Chapter five will then explain the methods of a study designed to examine the hypotheses. Finally, chapter 6 will detail the results and conclude by discussing the implications, limitations, and suggestions for future research.

## Chapter 2: A Brief Review of Newspapers Transitioning to the Internet

Although the Internet became available for commercial applications in 1988, the Newspaper Association of America did not begin recording usage data until 2004 (Oct. 2008). Nielsen/Net Ratings and the Newspaper Association of America have been keeping track of all newspaper website audience measurements as well as advertising revenue figures since January of 2004 (Oct. 2008). All the data presented in this thesis is for the United States.

Figure1  
Total active reach (the percentage of active Internet users that visit newspapers on an average month) Source: NAA 2008

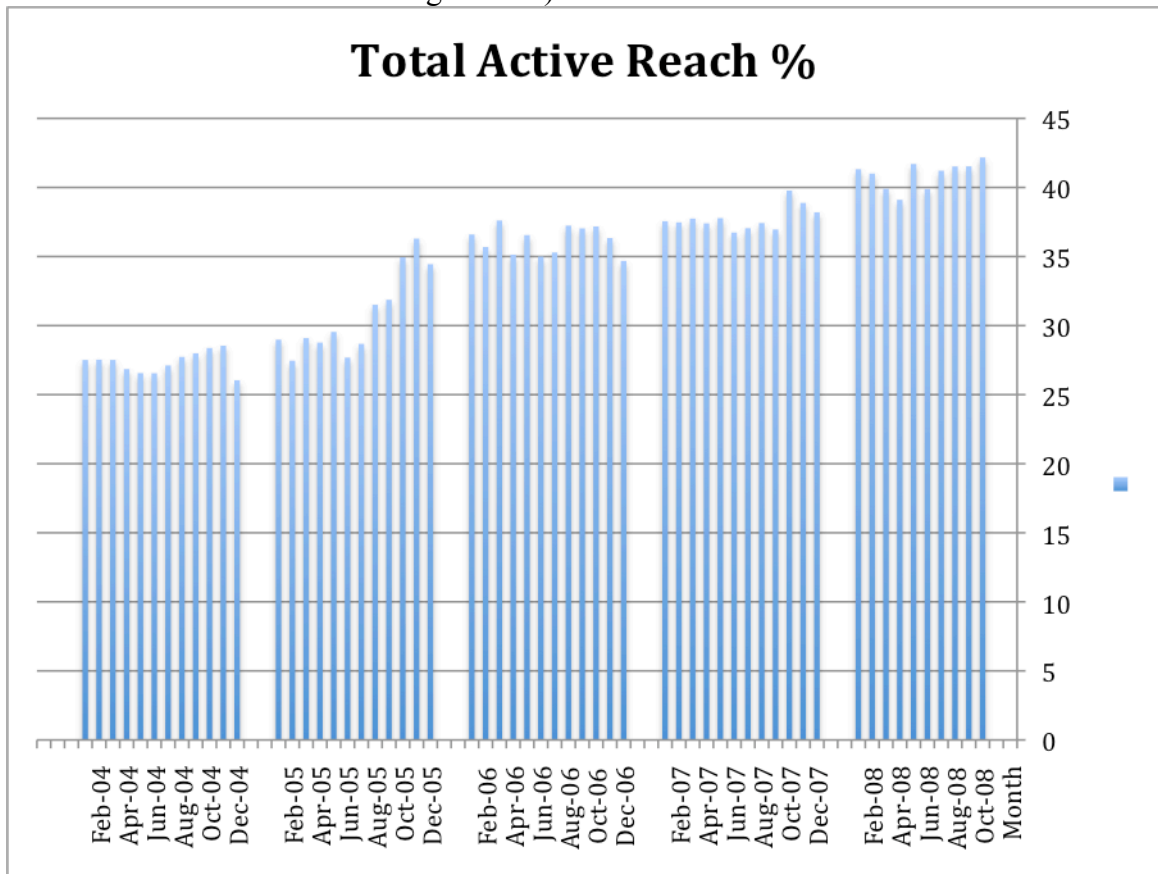


Figure 1 above shows the fairly steady growth of newspaper website Active Reach as a percentage of total internet users. Newspaper web site audience increased sixteen percent in the third quarter of 2008 to 68.3 million visitors or 42.7% of all internet users. All of the industry data shows that online newspaper audience is growing (Sigmund 2008).

Table 1

This table shows growth in all categories for the 2008 quarter and 2007 quarter

Month	Unique Audience	Active Reach Percentage	Page Views	Pages per person	Time Per Person (mm:ss)	Visits Per Person
July-08	67,952,516	41.21	3,410,220,416	50.19	44:19	8.48
Aug-08	69,313,361	41.52	3,421,605,140	49.36	43:18	8.52
Sept-08	67,703,978	41.53	3,686,180,159	54.45	49:20	9.20
Q3 Average	68,323,285	41.42	3,506,001,905	51.33	45:49	8.73

Source: Nielsen Online Custom Analysis

Month	Unique Audience	Active Reach Percentage	Page Views	Pages per person	Time Per Person (mm:ss)	Visits Per Person
July-07	59,635,245	37.05	2,735,019,015	45.86	40:07	8.00
Aug-07	59,278,593	37.42	2,828,613,489	47.72	41:52	8.22
Sept-07	58,160,770	36.96	2,836,328,492	48.77	43:44	8.15
Q3 Average	59,024,869	37.14	2,799,986,999	47.45	41:54	8.12

Source: Nielsen Online Custom Analysis

All newspaper website audience measurements are trending upward in every measured category. This is true for the 2008 quarter as well as the same quarter in the previous year. As NAA announced in their Q3 2008 press release, “Newspapers are continuing to enhance their Web sites with dynamic features, video and other interactive tools that deliver high levels of user engagement,” said Randy Bennett, NAA’s senior vice president

of Business Development. “The dramatic increase in page views suggests users are visiting newspaper Web sites frequently throughout the day.”(Sigmund 2008)

Table 2  
Internet usage and population statistics for North America

<b>Internet Usage and Population Statistics for North America</b>						
<b><u>NORTH AMERICA</u></b>	<b>Population ( 2008 Est. )</b>	<b>% Pop. N. A.</b>	<b>Internet Usage, Latest Data</b>	<b>% Population (Penetration)</b>	<b>% Users N. A.</b>	<b>Use Growth ( 2000-2008 )</b>
<b><u>Bermuda</u></b>	66,536	0.0 %	<b>48,000</b>	72.1 %	0.0 %	92.0 %
<b><u>Canada</u></b>	33,212,696	9.9 %	<b>28,000,000</b>	84.3 %	11.3 %	120.5 %
<b><u>Greenland</u></b>	56,326	0.0 %	<b>52,000</b>	92.3 %	0.0 %	192.1 %
<b><u>St.Pierre &amp; Miquelon</u></b>	7,044	0.0 %	---	0.0 %	0.0 %	n/a %
<b><u>United States</u></b>	303,824,646	90.1 %	<b>220,141,969</b>	72.5 %	88.7 %	130.9 %
<b>TOTAL NORTH AM.</b>	<b>337,167,248</b>	<b>100.0 %</b>	<b>248,241,969</b>	<b>73.6 %</b>	<b>100.0 %</b>	<b>129.6 %</b>

NOTES: (1) The North American (N.A.) Statistics were updated as of June 30, 2008. (2) CLICK on each country name for detailed individual country and regional statistics. (3) The demographic (population) numbers are based on data contained in the [US Census Bureau](#). (4) Mexico is included together with the Central American countries according to the United Nations Statistical Division listings. (5) The most recent usage information comes mainly from the data published by [Nielsen/NetRatings](#), [ITU](#), and other reliable sources. (6) Data may be cited, giving due credit and establishing an active link back back to [Internetworldstats.com](#). (7) For definitions and help, see the [site surfing guide](#). Copyright © 2008, Miniwatts Marketing Group. All rights reserved.

The data above shows the total United States internet usage to highlight the total internet penetration as a comparison against newspaper industry data in Chart 1. It is important to know the penetration data in these charts to make the thesis argument that Internet penetration at 72.5% is now for all intents and purposes, ubiquitous (NAA Oct. 2008).

Figure 2  
Quarterly Newspaper Internet Revenue

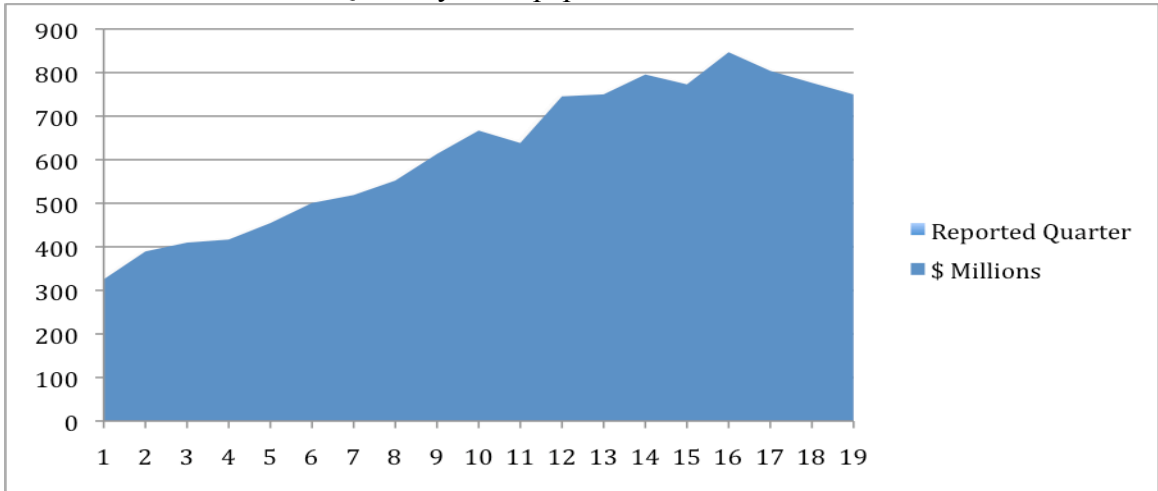


Figure 2 shows newspaper online revenue which had been trending upward until the last three quarters of 2008. Remember that Chart 1 and the data behind it are showing historic online growth quarter after quarter, year after year (NAA Nov. 2008).

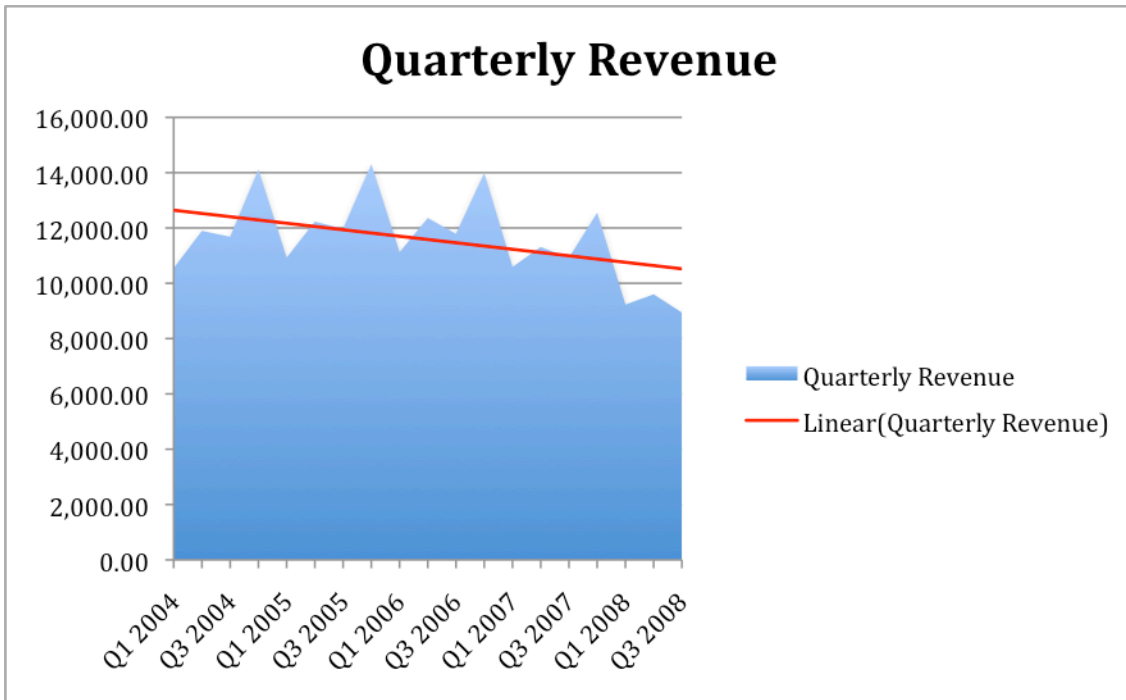
Table 3  
NAA newspaper website revenue data for assembling Figure 2

Last Update: 11/26/08					
Year	Reported Quarter	TOTAL ONLINE		TOTAL PRINT AND ONLINE	
		\$ Millions	% Change	\$ Millions	% Change
2004	1	325.39	28.30%	10,548.23	4.10%
	2	389.42	32.10%	11,897.72	4.80%
	3	409.71	23.40%	11,681.30	4.40%
	4	416.76	24.00%	14,116.74	4.70%
2005	1	454.62	39.70%	10,927.14	3.60%
	2	500.716	28.60%	12,231.77	2.80%
	3	518.975	26.70%	11,967.48	2.40%
	4	552.211	32.50%	14,308.21	1.36%
2006	1	613.282	34.90%	11,122.39	1.80%
	2	666.954	33.20%	12,361.79	1.10%
	3	638.339	23.00%	11,791.05	-1.50%
	4	745.485	35.00%	13,990.17	-2.20%
2007	1	750.04	22.30%	10,590.20	-4.80%
	2	795.68	19.30%	11,310.90	-8.60%
	3	773.029	21.10%	10,920.35	-7.40%
	4	846.871	13.60%	12,553.29	-10.30%
2008	1	804.0475	7.20%	9,229.53	-12.85%
	2	776.5796	-2.40%	9,601.64	-15.11%
	3	749.8381	-3.00%	8,942.43	-18.11%



Notice also the steady decline in total print and online revenues beginning in the first quarter of 2004 highlighted by the trendline in Figure 3. Total combined print and online advertising revenue has fallen. Money flowing into the newspaper industry is falling.

Figure 3  
Quarterly combined advertising revenue (NAA Nov. 2008)



This background information is presented to bring the reader up to speed on the current economic trends in the newspapers industry as well as get a better feel for the overall trends in internet usage and reach in the United States. The biggest takeaway is that newspaper website audience is rising, and newspaper website revenue is not following suit.

## **Chapter 3: State of the Art**

### 3.1 The Newspaper Industry, In the Presence of the Internet

Because of the disruptive nature of the Internet on the newspaper industry this paper begins the review of the state of the art with a paradox from 1964 by Marshall McLuhan, “the medium is the message” (Lapham & Mcluhan 1994). What he meant by that quote is described as meaning, “Whenever we create a new innovation - be it an invention or a new idea - many of its properties are fairly obvious to us. But it is also often the case that, after a long period of time and experience with the new innovation, we look backward and realize that there were some effects of which we were entirely unaware at the outset” (Federman2004).

The pricing of goods or services in basic economic theory is determined by calculating the costs incurred to produce the item and adding a profit margin on top of it. This is a simple matter of supply and demand, which prior to the Internet gave them immense pricing power. Newspapers, because of their exclusive distribution networks between readers and advertisers were able to add hefty double-digit profit margins to their costs (Edmonds2008).

The major problem with this business model is that once the Internet became widely accepted, the virtual monopoly in their geographic distribution area vanished. Newspapers are now competing against, not another physical product in their hometown, but the capabilities of the entire Internet on a computer or mobile device (Edmonds2008). Figure 5

shows worldwide Internet usage from 1995 and projections for growth going into 2010. The graph is steep and there are no indications at this time that growth is slowing.

### **What are the Pundits Saying?**

NYU professor, author, and information technology expert Clay Shirky declared back in 1995 that newspapers were doomed to serious value problems (Shirky1995) and recently revisited the ideas, “It didn’t take much vision to figure out that unlimited perfect copyability, with global reach and at zero marginal cost, was slowly transforming the printing press into a latter-day steam engine”(Shirky2008). He claims the newspaper industry listened to him, and then promptly ignored his opinion.

On September 12, 2007 author and Harvard Fellow, Doc Searls wrote about the utility of traditional advertising, and how better ways of connecting customers to products and services have been created on the Internet. He cautions newspapers that assume advertising will always be around at the levels prior to the existence of the Internet. As he writes,

“While rivers of advertising money flow away from old media and toward new ones, both the old and the new media crowds continue to assume that advertising money will flow forever. This is a mistake. Advertising remains an extremely inefficient and wasteful way for sellers to find buyers. I’m not saying advertising isn’t effective, by the way; just that massive inefficiency and waste have always been involved, and that this fact constitutes a problem we’ve long been waiting to solve, whether we know it or not.

...The Holy Grail for advertisers isn’t advertising at all, because it’s not about sellers hunting down buyers. In fact it’s the reverse: buyers hunting for sellers” (Searls2007).

On April 7, 2008 Nicholas Carr put forth a theory he referred to as "unbundling". Boiled down to its core the theory states that advertisements (bundled with content) in a printed newspaper produce a product worth more than the sum of their parts. The opposite is true online where ad performance must stand alone on a single web page. As he writes,

"As soon as a newspaper is unbundled, an intricate and, until now, largely invisible system of subsidization quickly unravels. Classified ads, for instance, can no longer help to underwrite the salaries of investigative journalists or overseas correspondents. Each piece of content has to compete separately, consuming costs and generating revenues in isolation" (Carr2008).

On April 22, 2008 Jay Rosen revisits Searls comments from 2007 to highlight the idea that whether ad spending grows, shrinks, or stays the same:

"Advertisers aren't in business to advertise; they do it to reach customers making a buying decision. If there were some other way of reaching that person, some other way for buyers and sellers to communicate, advertising would become more and more superfluous" (Rosen2008).

And Carr's unbundling theory:

Carr "How do we create high quality content in a world where advertisers want to pay by the click, and consumers don't want to pay at all?" The answer may turn out to be equally simple: We don't" (2008).

Rosen "I think he's right" (2008).

Regardless of the new media situation, newspapers have attempted to adapt to this new communications medium. Almost all newspapers however have created websites for their readers and advertisers to engage online. The Wall Street Journal for example launched its

first website in 1996 as a news service to their paying print newspaper subscribers (Dow Jones2006). In September of 1998 Google begins searching the Internet (Google2008). The first organized publishing competitor to established newspapers and their sites was Open Diary created in 1998 as a blogging platform that allowed readers to submit comments on other writer’s blog entries (Seminerio1998). At least one smaller newspaper began experimenting with blogging this same year. The Charlotte Observer posted a blog about Hurricane Bonnie (Scanlan2003). During this time newspaper revenues were still growing strongly and continued to do so until 2002 when Internet usage hit a tipping point. Suddenly everyone was on the Internet. Social networking sites like Fotolog and Friendster arrived in 2002. LinkedIn, Myspace, Wordpress and Last.FM arrived in 2003. Flickr and Facebook in 2004. YouTube and Ning in 2005. Facebook (open to the general public) and Twitter in 2006 (Boyd2007).

Figure 4  
Number of Blogs Tracked by Technorati

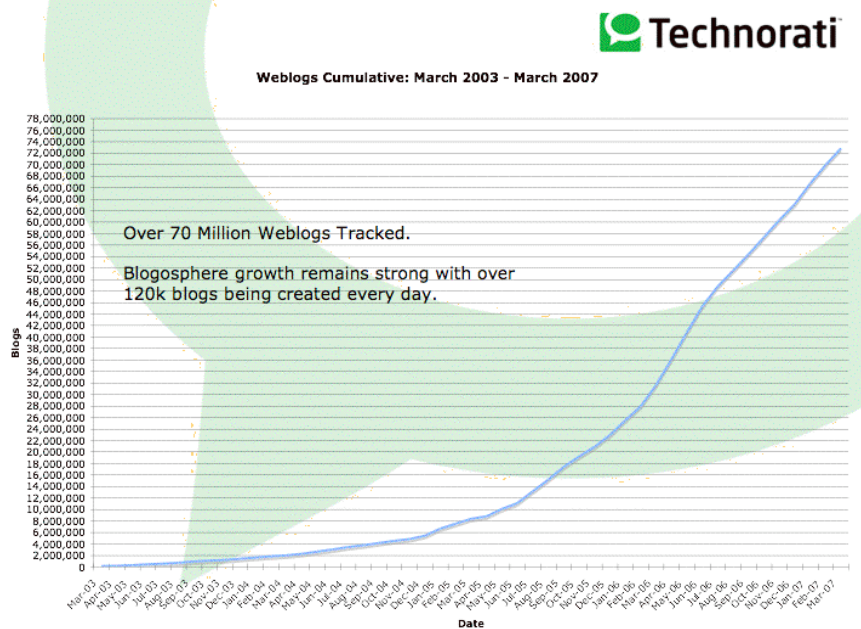
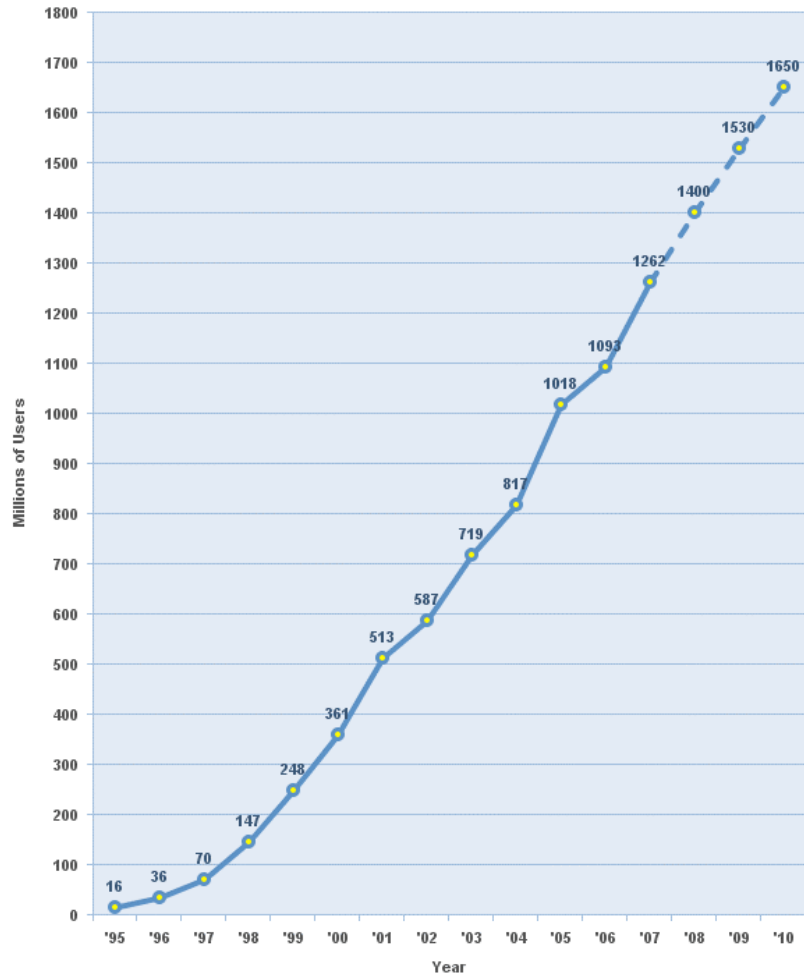


Figure 5

### Internet Users in the World Growth 1995 - 2010



Source: [www.internetworldstats.com](http://www.internetworldstats.com) - January, 2008  
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As time went on, the Internet got more sophisticated and people became familiar with using it. Indeed an entire generation now exists that does not know a time when the Internet did not exist. The value of newspaper content began falling steadily as the capabilities and technology became cheap, fast, and ubiquitous. Modem speeds went from slow to fast and from a telephone connection to cable to wireless. The high barrier to entry costs of self-

publication and self-advertisement are virtually eliminated on the Internet. In online publishing, there are no printing presses, no mailrooms, and anyone in the world can produce content.

Total print and online revenue growth leveled off in 2002 and began steadily falling in 2005. This happened only two years after NAA began tracking online advertising revenue. Beginning in 2003, several newspapers launched free weekly newspapers. The revenue and interest these papers generated is mixed, “Despite the gains in New York, Metro papers in Philadelphia and Boston are struggling” (Flamm2007).

2005 proved to be a year of experimentation for newspapers online. The Las Angeles Times launched a Wiki called Wikitorial where any reader could go on the site and edit content. The site was shut down in 2 days because of a barrage of pornographic material that ended up on the site (BBC2005). In an effort to battle their declining print revenues and bolster Internet revenues the nation’s number one newspaper website by unique visitors, NYTimes.com launched Times Select a paid feature on their free website. The idea was that readers would pay to read the “valuable” articles written by their editorial columnists. The Times Select had other features as well such as the ability to interact with the columnists through a blog and access to archived materials on the NYTimes.com website. The exercise was a failure and two years after launch the feature was removed and the entire site opened back up to anyone (Sanders2007).

In 2008 almost all mainstream newspaper websites are, like all other Internet content, free. Those newspapers are generating their revenue almost exclusively from advertising on the site. The few exceptions are business newspapers. Based on a quick trip to WSJ.com, FT.com, and IBD.com all charge for full access to their website. Those sites serve up very specific content, business news, and charge their readers fees to access this valuable content. It is an important distinction between what they are publishing and what general information news sites are publishing. The pricing power for these papers has not been impacted as much as their generic counterparts but they are the exception, not the norm.

Figure 6  
Stock performances of select publicly traded newspaper companies.



Nearing the end of 2008, newspapers had lost almost all of their market capitalization. Newspaper stocks like MNI (McClatchy) that once traded in the sixty-dollar range in 2004 were now selling for two dollars. The New York Times (NYT) dropped from a high in June 2002 of \$51.88 to a low of \$4.95 in November of 2008 (Mutter2008). NAA reported that online newspaper advertising in 2006 totaled \$2.664 billion and 2007 totaled \$3.165



billion representing a ~26% increase (NAA2008). However those figures represent roughly 10% of total advertising revenue, the other 90% coming from rapidly declining print advertising revenues. Without a new business model to save them, newspapers continue to attempt to make money doing the only thing they know what to do, printing a newspaper, and making money on advertising, print and online. They are cutting costs, reducing web widths, adding “new” content in the form of blogs, participating in social media like Facebook, utilizing RSS feeds, and increasingly linking out to other non-news sites. However, as reported in the annual 2008 State of the Media report, “the concept of mass media has ended” (Edmonds2008).

### 3.2 The Value of Newspaper Advertising, In the Presence of the Internet

Newspapers were once the only distribution platform for people and businesses to reach a certain target audience. By placing advertisements in newspapers, people and businesses were able to target a geographic area with their advertisements. It was a shotgun approach to advertising but being that there were few alternatives, radio, TV, direct mail, everyone used it, and it became a \$50 billion industry (NAA2008).

It was not uncommon for the classified section of the newspaper to be 20 or 30 pages long, filled with job postings, home sales, car sales and other items for sale, as well as personal sections. In a 2006 Pew Research state of the news media report, PewResearch.org reported that, “From 1950 through 1999, newspaper revenue grew seven percent a year” (Pew2006). This is before the widespread acceptance of the Internet.

Once people and companies accepted the Internet as a viable medium for communication, the advertising revenue numbers change dramatically. From 2000 to 2006, total newspaper advertising revenue grew only 0.5%, despite 30% quarter over quarter online advertising growth and growing audience reach. Advertising that once went into a newspaper or even a newspaper's website now found better targeting capabilities on their own, online (Pew2006).

### **eBay.com**

Founded in California 1995 eBay.com is an online auction where people can buy and sell almost anything. eBay is the number 8 website in the USA and number 20 in the world. In 2007 their annual revenue was \$8.46 billion dollars (eBay2007).

### **Craigslist.org**

Online classified site Craigslist.org was started in 1995 for the San Francisco Bay Area as kind of a bulletin board but expanded to include a "jobs" section and grew into 31 cities around the country by 2003. At the time of this writing Craigslist is one of the largest websites in the world, serving 450 cities in 50 countries. Craigslist is a for profit company that operates with a non-profit attitude according to founder Craig Newmark. That explains why the website only generated \$80 million in 2007 despite serving 50 million people per month (Craigslist2008).

### **Monster.com**

Monster Worldwide is another web startup competing with newspaper classified sections. Monster.com launched in 1995 and now operates in 35 countries serving up job listings. The company generated \$1.35 billion in revenue for 2007. Craigslist, Monster, and bidding site Ebay shattered the monopoly that newspapers had on classified by offering listings for free or little money and eliminated approximately 40% of newspaper's total advertising revenues (Monster2007).

### **TechCrunch**

TechCrunch is a blog covering technology news. Started in 2005, the website is the number 2 blog in the nation, receives approximately 1.2 million visitors per month and generates \$2.88 million per year in revenues. "It sells sponsorships that allow advertisers to display on the home page at \$10,000 per month. It also uses Federated Media to sell display ads, keeping 60 percent of the revenue. And it charges \$200 to list in its Cool Jobs section, getting about five or six want ads per day." The company is operating in the black according to a 2007 article by The San Francisco Chronicle (Zuckerman2007).

Other advertisers moved to take advantage of the Internet as well. Websites like Myspace, Facebook, Adultfriendfinder, Match, and eHarmony eliminated the need for a personals section in the newspaper, another revenue stream lost. These services, like Craigslist, work best without geographic barriers that the newspapers continue operating in.

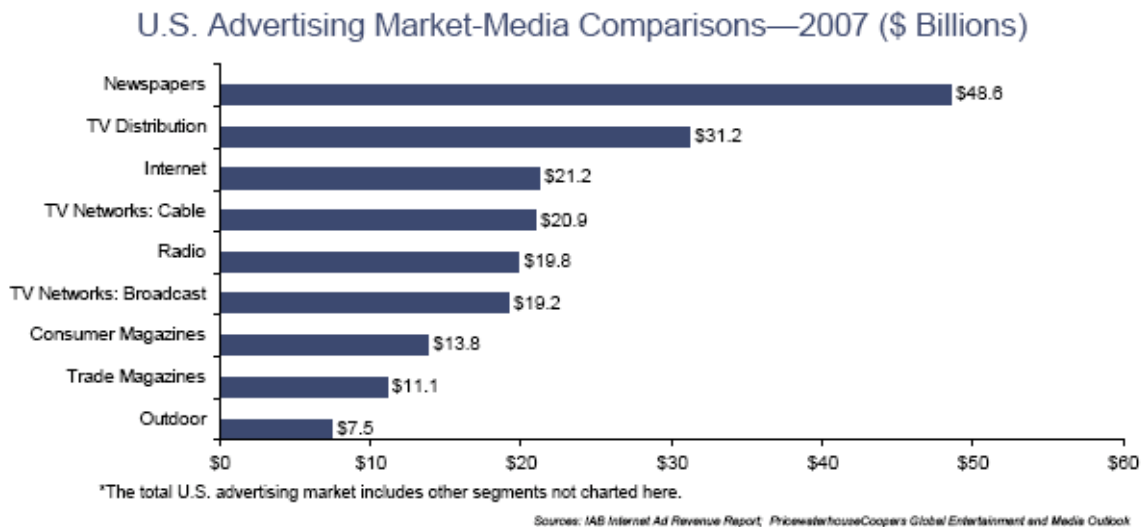
In a broader view of advertising in the new Internet paradigm it must be mentioned too that while certain traditional advertising is being marginalized as above, other new forms of connecting businesses to customers are being created. One such entire new category of advertising competition is the business website. No longer do car dealerships, locksmiths and realtors need to place an ad in newspapers. They now use their own websites to better display the products and services, which they were selling. These business websites are then found using search engines like Google, Yahoo, CitySearch, and Yelp and once the prospective customer arrives on the site, they are greeted with mountains of colorful pictures, comparison information, loan offers, and any other service associated with helping the purchase process.

Another new, free competitor to paid advertising is the free listing. Any company can set up free accounts on Yahoo! Local and Google Maps to list their place of business. Here is the Google Maps boilerplate from their site, "Use the Local Business Center to create your free listing. When potential customers search Maps for local information, they'll find your business: your address, hours of operation, even photos of your storefront or products. It's easy, free, and you don't need a website of your own." (Google Maps) These convenient features are indexed by search engines and allow potential customers to view business information, user reviews, and print out driving directions to the place of business. They are popular too. As of December 2008 Yelp boasted 2.3 million business reviews and was ranked the number 150 website in the USA. Another business listing website, CitySearch.com, is currently ranked the number 205 website in the USA. (Alexa) According to the CitySearch.com website they have, "14.5 million business listings, over

600,000 user reviews, and ratings on over 2 million business locations nationwide”.  
(CitySearch)

Internet marketing such as viral marketing campaigns, search engine optimization, search engine marketing, banner ads, email marketing and web 2.0 techniques like blogs, and wikis are also new competitors for ad revenue. .

Figure 7

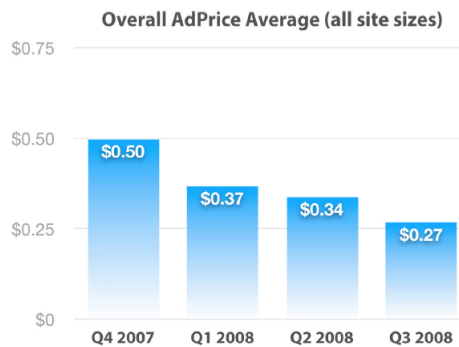


Internet advertising went from a non-existent business in 1993 to a \$21 billion industry in 2008 (NAA2008). The faster speed, cheaper costs, personalization, and quantification of online advertising are the main reasons for its success and growth. Not only can companies now completely control how and where they want their advertising to appear, they can analyze the data associated with their advertisements and adjust how well they are performing.

Newspapers have never been faced with this level and sophistication of competition. Newspapers' advertising and content business models relied on the difficulty and high costs of delivering news and advertising content from businesses to individuals. Their competitive advantage has been radically devalued by the existence of the Internet.

Ironically, as newspaper websites continue to grow, pageviews and advertising impressions will continue to expand and dilute. This puts continuing downward pressure on the CPM model advertising model. This is another reaction to supply and demand. The supply in this case is a growing number of web pages every time new content is added to a website. The advertising spaces on those pages also grow at a multiple of the number of ad spaces on the page. The result is more ad space than quality advertising to fill it. The value of the CPM display ad now goes down. Figure 8 shows this phenomenon in action.

Figure 8  
Pubmatic Q3 2008



**Key Finding**

- Q3 08's average ad price of 27 cents is a 27% drop from Q1's price of 37 cents and a 21% drop from Q2's price of 34 cents

Pubmatic's Q3 2008 report of display advertising revenue reports that all display advertising pricing is trending downwards. The best pricing was found to be on business and finance websites followed by gaming websites. The value of ad inventory for "small" (less than 1million page views per month) sized websites was more than triple the value of "large" (100million page views per month or more) sized websites in Q3 08, with values of 61 cents and 18 cents, respectively. (Pubmatic Q3 2008)

So the revenue per thousand impressions is falling. What about the engagement of readers and the advertisements they are seeing? In a multi-media engagement study conducted between July 2007 and June 2008 it was reported that, "Only 28% of the audience of an average news program, website or magazine gets valuable information about products and services advertised there, making news venues less effective at conveying ad messages than all forms of media combined, according to consumer research from Experian Simmons" (Experian2008).

A recent Wall Street Journal article states that most newspapers charge \$20 to \$10 CPM for ads sold by the papers, however usually more than 50% of the available ad slots do not get sold. These slots are then filled by ad agencies like Google Adsense, which generate up to \$1CPM but usually much less as the Pubmatic data in Figure 8 reveals. (WSJ2008/12/15) Additionally, IAB's 2006 report states that the top 50 websites in the world receive 93% of the available online advertising revenue, making the opportunity for smaller news sites to generate meaningful revenue difficult. (37)

### 3.3 News Website Economics

#### **NewYorkTimes.com**

NewYorkTimes.com is ranked the number 1 newspaper website in the nation, the number 44 website in the United States, and the number 85 website in the world. (Quantcast, Alexa 2008). In total, Internet businesses accounted for 12.1% of total revenues in October 2008 versus 10.5% in October 2007. (NYT Q3 2008)

A review of The New York Times 2007 annual report as well as their quarterly reports for 2008 revealed that online advertising in general is growing approximately 12% year over year. 2008 NYT online advertising revenue is projected to be ~\$350 Million or \$29.17 Million per month. The NYTimes.com reaches an average 15.6million people per month (Quantcast) and newspaper websites in aggregate reached 69.8 Million people (NAA). 65.4% of NYTimes.com Readers come from USA. My simple calculation reveals that NYTimes.com is reaching approx. 3.3% of the US population (15.6million x65.4%) =10.2024million/(305million) (NYT 10-K 2007).

#### **WashingtonPost.com**

WashingtonPost.com is ranked the number 2 newspaper website in the nation, the number 93 website in the United States, and the number 286 website in the world. (Quantcast, Alexa 2008) 2007 year end revenue for The Washington Post newspaper publishing division was \$889.9 million of which, \$114.2 million was from their online site washingtonpost.com. (WPO 2007 10-k) A quick calculation reveals that online revenues accounted for only 12.8% of total revenues.



“During 2007, revenue generated by the Company’s online publishing activities, primarily washingtonpost.com, increased 11% to \$114.2 million, from \$102.7 million in 2006. Display online advertising revenue grew 16% and online classified advertising revenue on washingtonpost.com increased 10%. A small portion of the Company’s online publishing revenue is included in the magazine publishing division”. –Washington Post 10-K 2007 annual report

### **LATimes.com**

LATimes.com is ranked the number 3 newspaper website in the nation, the number 117 website in the United States, and the number 374 website in the world. (Quantcast, Alexa 2008) “Latimes.com generates \$60 million a year, about 5 percent of the newspaper's total revenue. Nearly 80% of our web revenue (\$47 million) is from related but separate classified sites such as CareerBuilder. Display advertising on latimes.com brings in just \$13 million.” (MediaBistro2007) The Las Angeles Times total operating revenue for 2006 was \$1.095 Billion.

### **HuffingtonPost.com**

The Huffington Post is an online only news site launched in 2005 and operated with financial support from advertising revenue and continued support from venture capitalists. The site is ranked 118 in the USA and 484 in the world, serving up 179million page views per month. (Alexa, Quantcast) Despite all their large audience, the advertising revenue (approximately \$7.5 million) generated by the site is insufficient to sustain their operations.

Despite the highest readership of any newspaper in the United States, the New York Times only generated \$330 Million through online advertising in 2007. Total operating costs for that same year totaled \$2.928 Billion. It is widely reported that total newspaper operating costs would be reduced by 35% if newspapers eliminated their print product. Here is the precedent for print costs:

“Going totally online eliminates the cost of paper and circulation delivery and radically reduces production cost. By my back-of-the envelope calculations, based on Inland Press survey data, that might be about 35 percent of expenses”.

And...

“Paper and production costs account for nearly 25% of total expense. Circulation sales and billing together with fleets of trucks and delivery employees throwing papers on the front lawn account for 10% more” (Edmonds2007).

Some disparity in distribution numbers comes from figuring in Circulation revenues, which typically accounts for 30% of the top line. In the case of NYT Q3 2008 circulation represented 32.8% of total revenue. Production costs however consumed ~48% of total revenues. The difference is roughly a 10% cost or in this case 16%.

In a recent New York Times article, the vice president of interactive with newspaper company E.W. Scripps Company Rusty Coats said his company hopes to break even by 2012. That same article however states that, “But while newspaper sites received 44 percent of local Internet revenue in 2004, that figure dropped to 27 percent this year,

according to Borrell Associates. Local advertisers, though, are spending more and more money online — but it is mostly going to portals and stand-alone Web sites, not newspapers”(Clifford2008).

Average profit margins for publicly reporting companies have halved to 11% for the first nine months of 2008 from 22% in 2003, estimates analyst John Morton. (Peers2008)

### **National Public Radio**

If a newspaper’s mission is to serve the public good then its best hope for economic sustainability may be to run the paper as a non-profit. NPR does a good job of this: “NPR supports its operations through a combination of membership dues and programming fees from over 860 independent radio stations, sponsorship from private foundations and corporations, and revenue from the sales of transcripts, books, CDs, and merchandise.“ NPR also collects money through government grants. It must be noted that 2007 year-end revenue for NPR Inc. was \$179 Million. As of December 2008, NPR will let go 64 of its 889 employees, or 7 percent of its workforce, to close a \$23 million shortfall. NPR.org generates 3.5 million unique visitors per month making it the roughly the number 375 website in the country. (Quantcast)

### **Talking Points Memo**

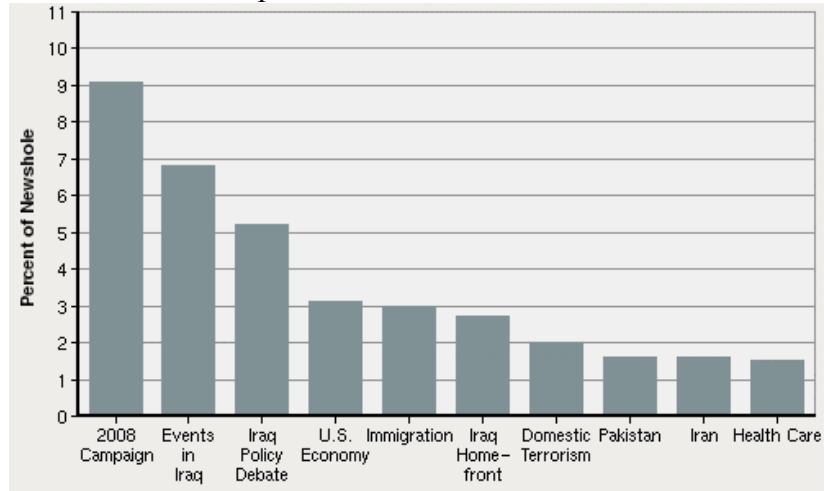
From their site, “TPM is funded by advertisements and reader contributions. Please give and give generously to keep the site online as a fresh, independent voice in political journalism”. Began in November 2000 TalkingPointsMemo is a blog covering news and

politics. The site never had the cost burden associated with printing a newspaper. However, the site must rely on a combination of advertising revenue and reader donations, as well as help from readers in composing some stories. On several occasions the publication has asked its readers to read through mountains of documents to parse out specifics of a news story. The website is ranked 2,791 in the USA and generates roughly 750,000 unique visitors per month (Quantcast).

Review of the available literature into the state of the online newspaper industry involved a lot of information coming from newspaper trade organizations, online advertising organizations and financial reports from publicly traded newspapers. Newspaper journalists and media pundits were also used as source material. There is not a lot of research in academia on the transformation of the newspaper industry in the age of the Internet.

What the available literature tells us is that the newspaper industry is experiencing steep circulation declines in their print product and steep revenue declines in their print product. Online, newspaper websites are growing their audience reach higher and higher ever since the data started being measured in 2003 but the revenue still only accounts for 10 to 12% of total advertising revenue for the entire industry. Total advertising revenue has been falling since the beginning of 2006. In *The Great Unbundling*, Nicholas Carr states, “The most successful articles in economic terms are the ones that attract high priced ads”. It must be noted that every single online media company mentioned in this thesis paper other than the general news sites is economically sustainable.

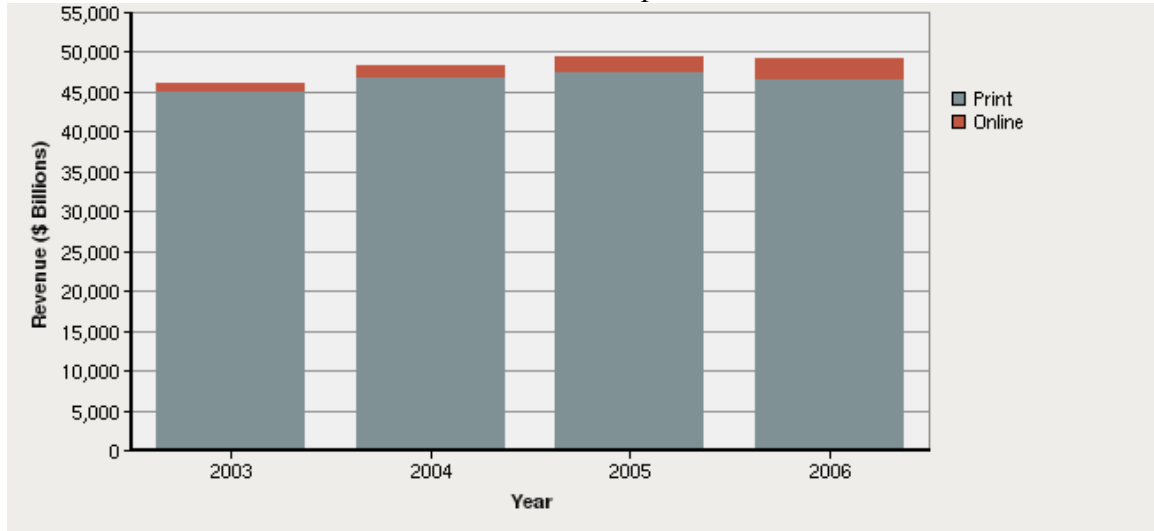
Figure 9  
Top Ten News Stories of 2007



Following Carr's statements Figure 9 shows a breakdown of news story by content and the percentage of the newshole that content took up.

The pundits have been telling the newspaper industry since 1995 that their print business model has been shattered for various reasons but without a full and concrete explanation of the economics of online news publishing. The reaction from the newspaper industry has been to prepare for their decline by cutting costs, and developing a web presence for their print newspaper to grow their online audience. It is now clear, reviewing the state of the art, that these preparations have been insufficient to stem the losses of advertising revenue. To reiterate, the disparity of print revenue to online revenue for the entire newspaper industry is 90% to 10%.

Figure 10  
Print VS Online Expenditures



According to the State of the News Media 2008 study, the total number of USA newspapers as of the latest poll stood at 1,437. If we are to assume that each of these newspapers had a website, they would then be fighting over ~\$3 billion of online newspaper ad revenue or ~\$2 million each (Edmonds2008).

In that same study the report concludes with these words, “Even weakened, newspapers remain the top source of news for their communities. The editorial inroads of community-based online publications are patchy geographically and have been slow in coming”. There is no discussion about generating sustainable revenues in the conclusion section of their report other than to suggest, “...balance – urgent attention to finances but taking care not to destroy what is essential for longer-term viability”. (Edmonds2008) They do not give any indication what specifically is “essential” to long term viability.

## Chapter 4: Research Question

### 4.1 Is The Krugman Paradox real?

This is the question the thesis is attempting to answer. The paradox states that regardless of online audience reach, general interest newspaper websites cannot generate an economically sustainable advertising revenue stream. Acceptance of the paradox implies that in order for news sites to become profitable they must change their content, from general news to something more valuable. Absent such a content change, newspapers must subsidize their unsustainable business with outside money. Absent either of these changes, newspapers will cease to exist as sustainable business entities online.

### 4.2 Justification

Seemingly since the Internet began being utilized by the masses, it has been said, as Clay Shirky did in 1995, that newspapers will go out of business. From then until now newspapers have been attempting to prove that assumption incorrect by slowly moving their business models online. As time went on and internet companies like Craigslist, Google, and even new industries like online marketing lured newspapers' most valuable paying customers away, newspapers attempted to change more in the hopes of retaining readership as it moved online. They tried all the new media methods of "success" such as blogging, videos, starting a wiki, social networking, charging for content, then not charging for content, sharing content via RSS feeds, and lately linking out.

Newspapers also cut their costs during this period to try and get to breakeven faster, but as the numbers show, Internet advertising revenue could not catch up, not even close. For the industry as a whole, online revenue generates only 10% of total revenues. At a time when companies like Google make \$16.593 billion, eHarmony make \$200 million, Monster Worldwide make \$1.35 billion, and eBay make \$8.46 billion, the newspapers were trying to figure out why their product couldn't attract "print" level revenues or even local advertisers. The NY Times article with Rusty Coats alludes to the problem. Businesses too are using the internet to advertise, but the advertising is not via getting on a local newspaper website, it is by building their own site and doing things like listing themselves on Yahoo local, Google Maps, Yelp, and maintaining relationships via email newsletters. Newspapers are faced with massive competition, unrestricted from geographic boundaries.

The Pubmatic data shows that it is much more effective for advertisers to appear next to content that helps sell their product or service. IAB data backs this up. The CPM rates that news sites get are some of the lowest of any measured category. The highest CPM rates go to business, finance, and gaming sites. The content on these sites lend themselves to actionable advertisements. General information news sites do not. Stories about iPods will sell iPods. What is the best product to sell next to a 9/11 story, or a Mumbai attack story? Newspapers cannot charge high CPM rates for advertising on their site because the content does not lend itself to actionable click-throughs, the money that would have been spent on a newspaper or news site is being spent on websites, and targeted advertising on niche sites.



If the advertising will not cover costs, will people pay for a subscription? So far no one is willing to pay for such coverage at a general news site. The New York Times “Times Select” model, the non-profit NPR model, and even the religious Christian Science Monitor model all fail in this attempt. All three publications rely on subsidy to support their operations. It is no coincidence that niche business sites that charge for content like IBD.com, FT.com, and WSJ.com exist in a category with the highest CPM pricing. The content on those sites is valuable to readers and advertisers. The value of the content has been deemed to be high enough to justify the subscription costs.

Newspapers continue to attempt to generate online advertising revenue as if it were print revenue in an age when the Internet did not exist. It should be clear by now that this method of generating economically sustainable revenue for a general information news site is impossible. Research for this thesis uncovered not one single newspaper website that could sustain its operating costs without outside subsidy from print revenues, donations, government assistance, or church subsidy.

#### 4.3 Discussion of the Research Question

It is important to answer the question posed in this thesis paper to raise awareness of The Krugman Paradox and its implications for generating sufficient online revenue. When newspapers realize that their growth strategies are not sufficient in and of themselves to solve their revenue needs, other revenue strategies may be more seriously analyzed.

## Chapter 5: Problem Resolution

This thesis resolves the problem of determining whether newspaper websites can generate economically sustainable. Review of the literature studied the audience levels of the newspaper industry as a whole and for certain companies. Online, print and total revenues were also studied to reveal whether any newspaper sites were profitable. Also investigated were statements made by newspaper industry pundits who acknowledged the problems associated with moving a print newspaper online.

The thesis investigated financial statements of publicly traded newspapers to reveal the differences between revenues and costs to highlight to inability of online revenues to cover costs. Successful online businesses that rely on Internet advertising revenues were also explored to show that they could produce economically sustainable revenue streams.

Investigations into the total online advertising expenditures and CPM rates for display advertising were undertaken to reveal disparities in the rates between news sites and non news sites. The data shows the CPM rate for news sites to be among the lowest anywhere.

New media sites that have sprung up during this same period of time such as niche blogs, search sites, and listing sites were investigated to reveal whether they were producing economically sustainable advertising revenue streams.

This study looked at the annual State of the News Media reports generated every year from

2005 to 2008 by the Poynter Institute in Florida. The studies are comprehensive reports generated by a reputable source. These sources as well as industry pundits' comments were used to get information about consumer behavior and the advertising shift away from newspapers. The data and commentary also revealed the sentiment of key industry analysts and CEOs regarding the future viability of newspapers. Specifically the Newspaper Association of America's Vice President of Business Analysis & Research Jim Conaghan who is quoted following this question,

Q) "So will online advertising get to the point where it can revive newspapers, as a mainly digital product?"

A) The Newspaper Association's Conaghan believes the answer is yes". (Edmonds2008)

The data contained within this thesis as well as a review of the literature, do not in any way back up Mr. Conaghan's belief that online advertising can revive newspapers.

## Chapter 6: Conclusions

### 6.1 Conclusions

The problem stated in section has been answered. The Krugman Paradox is real. The paradox states that regardless of online audience reach, general interest newspaper websites cannot generate an economically sustainable advertising revenue stream.

Despite the newspaper industry's emphasis on online growth, it has been shown that the newspapers with largest online audience reach in the United States, The NY Times, The Washington Post, and The LA Times could not generate enough online advertising revenue to sustain their operations. These companies didn't fail by a small margin; on average they could only produce 1/10 of print revenues.

It has been shown that non-newspaper websites are capable of producing economically sustainable online advertising revenues. The audience size of successful online companies varies greatly. What does not vary is that successful online companies serve fill a very specific need. Whether it is job listings on Monster.com and Craigslist.org or getting tech news at TechCrunch.com, these companies are creating value by filling a specific need both to the reader and the advertiser.

Through the widespread acceptance of the Internet as an effective communications medium without geographic boundaries, a newspaper's value addition to readers and subscribers has been rendered nearly valueless.

## 6.2 Summary of Contributions

This thesis makes the following contributions to new knowledge.

1. This thesis demonstrates that general interest newspaper news sites are incapable of producing economically sustainable online advertising revenue streams, supporting The Krugman Paradox.
2. This thesis demonstrates that newspaper websites cannot rely on advertising revenue as their main source of income if they are to continue publishing general interested news content.
3. This thesis demonstrates that even if newspapers do go completely online and save 35% of their costs by making the switch, they will still fail to achieve economic sustainability.
4. This thesis demonstrates that newspapers must increase the value of the content they are providing to readers and advertisers by filling their specific needs.
5. This thesis demonstrates that newspapers, which fail to change their online strategy from simple growth, to need fulfillment, will go bankrupt.

### 6.3 Future Research

1. New revenue streams need to be the number one focus of newspaper right now.
2. An in depth report needs to be quickly done to find out what a newspaper's core competency is NOW, in the internet paradigm.
3. An in depth account of how many business websites are in existence as well as the growth and usage of Google maps, Yahoo locals, and listing sites like Yelp would be interesting to compare to advertising revenue lost to the newspaper industry.

## References

- Alexa the Web Information Company*. (n.d.). Retrieved December 1, 2008, from <http://alexa.org> .
- BBC NEWS | Technology | Paper's 'wikitorial' trial halted*. (2005, June 21). Retrieved October 16, 2008, from <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/4114312.stm>
- Boyd, d. m., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), article 11. <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html> .
- Carr, N. (2008, April 7). *The Great Unbundling: Newspapers & the Net* . Retrieved September 16, 2008, from <http://www.britannica.com/blogs/2008/04/the-great-unbundling-newspapers-the-net/> .
- Citysearch: About Us*. (n.d.). Retrieved October 16, 2008, from <http://www.aboutcitysearch.com/>
- Clifford, S. (2008, November 2). New York Times - Scripps Tries to Steer Local Ads to Papers' Sites* . Retrieved October 16, 2008, from <http://www.nytimes.com/2008/11/03/business/media/03adcol.html?scp=1&sq=E.W.%20Scripps%20Company%20Rusty%20Coats%20&st=cse>
- Craigslist | about > factsheet*. (2008, September 18). Retrieved December 16, 2008, from <http://www.craigslist.org/about/factsheet>
- Dow Jones & Company Press Release: Wall Street Journal Online Launches Home-Page Redesign To Enhance Ease of Use*. (2006, March 14). Retrieved November 16, 2008, from [http://www.dowjones.com/Pressroom/PressReleases/Other/US/2006/0314\\_US\\_TheWallStreetJournalOnlineatWSJcom\\_3000.htm](http://www.dowjones.com/Pressroom/PressReleases/Other/US/2006/0314_US_TheWallStreetJournalOnlineatWSJcom_3000.htm)
- eBay Annual Report / Form 10-K*. (2007, December 31). Retrieved October 15, 2008, from <http://investor.ebay.com/common/download/download.cfm?companyid=ebay&fileid=192977&filekey=08eaa22c-c31c-41ad-b4d3-0a954354566f&filename=ar2007.pdf>
- Edmonds, R. (2007, December 5). *Pulling the Plug on Print | Committee of Concerned Journalists*. Retrieved August 16, 2008, from <http://www.concernedjournalists.org/pulling-plug-print> .
- Edmonds, R. (2008, March 17). *The State of the News Media 2008*. Retrieved October 6,

2008, from  
[http://www.stateofthenewsmedia.org/2008/narrative\\_newspapers\\_intro.php?media=4](http://www.stateofthenewsmedia.org/2008/narrative_newspapers_intro.php?media=4) .

*Experian Simmons - News Media Engagement Spring 2008*. (2008, June). Retrieved September 16, 2008, from <http://www.marketingcharts.com/television/news-media-less-effective-at-conveying-ad-messages-7025/experian-simmons-news-media-engagement-signature-mme-spring-2008jpg/> .

Federman, M. (2004, July 23). What is the Meaning of the Medium is the Message? Retrieved October 11, 2008 from [http://individual.utoronto.ca/markfederman/article\\_mediumisthemessage.htm](http://individual.utoronto.ca/markfederman/article_mediumisthemessage.htm) .

Flamm, M. (2007, December 22). *Crain's New York Business - Newspapers' free ride*. Retrieved December 1, 2008, from <http://www.crainsnewyork.com/apps/pbcs.dll/article?AID=/20071223/FREE/702168927>

*Google Inc. Corporate Information - Google Milestones*. (2008). Retrieved December 10, 2008, from <http://www.google.com/corporate/history.html>

*Google Maps - Local Business Center*. (n.d.). Retrieved December 1, 2008, from [www.google.com/local/add/businessCenter?gl=us&hl=en-US](http://www.google.com/local/add/businessCenter?gl=us&hl=en-US) .

Interactive Advertising Bureau. (2008, May). *IAB Internet advertising revenue report*. Retrieved Dec. 1, 2008, from [http://www.iab.net/media/file/IAB\\_PwC\\_2007\\_full\\_year.pdf](http://www.iab.net/media/file/IAB_PwC_2007_full_year.pdf) .

Mutter, A. (2008, July 15). *Reflections of a Newsosaur: Just \$3.6B: Total value of 10 news stocks*. Retrieved December 16, 2008, from <http://newsosaur.blogspot.com/2008/07/just-36b-total-value-of-10-news-stocks.html> .

Lapham, L., & McLuhan, M. (1994). *Understanding Media: The Extensions of Man*. London: The Mit Press.

Monster Worldwide. *2007 Annual Report / 10-K*. (2007, December 31). Retrieved September 9, 2008, from [http://library.corporate-ir.net/library/11/110/110723/items/290182/Monster\\_Annual\\_Report\\_Combined.pdf](http://library.corporate-ir.net/library/11/110/110723/items/290182/Monster_Annual_Report_Combined.pdf)

*mediabistro.com: LAT's Scathing Internal Memo. Read It Here..* (2007, January 26). Retrieved September 2, 2008, from [http://www.mediabistro.com/fishbowIIA/on/lats\\_scathing\\_internal\\_memo\\_read\\_it\\_here\\_51895.asp](http://www.mediabistro.com/fishbowIIA/on/lats_scathing_internal_memo_read_it_here_51895.asp)

*New York Times Company - Annual Report - 10-K*. (2007, December 31). Retrieved October 22, 2008, from



[http://www.nytco.com/pdf/annual\\_2007/2007NYTAnnual.pdf](http://www.nytco.com/pdf/annual_2007/2007NYTAnnual.pdf)

*New York Times Company Reports Preliminary Third-Quarter Results.* (2008, October 23). Retrieved November 16, 2008, from <http://phx.corporate-ir.net/phoenix.zhtml?c=105317&p=irol-pressArticle&ID=1216542&highlight=>

Newspaper Association of America. (2008, OCT.) *Nielsen//NetRatings, MegaPanel Data.* Retrieved Dec. 1, 2008, from <http://www.naa.org/TrendsandNumbers/Newspaper-Websites.aspx> .

Newspaper Association of America. (2008, Nov.) *Business Analysis and Research, NAA.* Retrieved Dec. 1, 2008, from <http://www.naa.org/TrendsandNumbers/Newspaper-Websites.aspx> .

North America Internet Usage Statistics, Population and Telecommunications. (2008, June). Retrieved November 1, 2008, from <http://www.internetworldstats.com/stats14.htm> .

*Peers, M. (2008, December 6). Tough Choices Loom for Newspapers . Retrieved December 6, 2008, from* <http://online.wsj.com/article/SB122851089222183735.html>

*Pew Research Center: Can the 'Dead Tree' Newspaper Survive?.* (2006, July 26). Retrieved October 16, 2008, from <http://pewresearch.org/pubs/43/can-the-dead-tree-newspaper-survive> .

*Pubmatic - Q3 2008 Report.* (2008, October 1). Retrieved November 1, 2008, from [http://pubmatic.com/images/AdPriceIndex\\_slug.jpg](http://pubmatic.com/images/AdPriceIndex_slug.jpg)

*Quantcast.* (n.d.). Retrieved December 16, 2008, from <http://www.quantcast.com/>.

Rosen, J. (2008, April 22). *"Where's the Business Model for News, People?"* . Retrieved December 16, 2008, from [http://journalism.nyu.edu/pubzone/weblogs/pressthink/2008/04/22/business\\_model.html](http://journalism.nyu.edu/pubzone/weblogs/pressthink/2008/04/22/business_model.html) .

Sanders, H. (2007, August 7). *New York Post - Timesselect Content Freed.* Retrieved December 16, 2008, from [http://www.nypost.com/seven/08072007/business/timesselect\\_content\\_freed\\_business\\_holly\\_m\\_sanders.htm](http://www.nypost.com/seven/08072007/business/timesselect_content_freed_business_holly_m_sanders.htm)

Scanlan, C. (2003, September 18). *Poynter Online - Chip on Your Shoulder.* Retrieved September 16, 2008, from <http://www.poynter.org/column.asp?id=52&aid=48413> .

Searls, D. (2007, September 12). *Toward a New Ecology of Journalism.* Retrieved October 10, 2008, from <http://blogs.law.harvard.edu/doc/2007/09/12/toward-a-new-ecology->

[of-journalism/](#) .

Seminario, M. (1998, December 1). *ZDNet.com The Open Diary Takes Off*. Retrieved October 10, 2008, from [http://news.zdnet.com/2100-9595\\_22-101090.html](http://news.zdnet.com/2100-9595_22-101090.html) .

Shirky, C. (2008, December 8). *The Newspaper Industry and the Arrival of the Glaciers*. Retrieved December 8, 2008, from <http://www.boingboing.net/2008/12/08/the-newspaper-indust.html> .

Shirky, C. (1995). *The Price of Information Has Fallen and It Can't Get Up*. Retrieved December 1, 2008, from [http://www.shirky.com/writings/information\\_price.html](http://www.shirky.com/writings/information_price.html) .

Sigmund, J. (2008, October 23). *Newspaper Web Site Audience Increases Sixteen Percent In Third Quarter To 68.3 Million Visitors* . Retrieved November 16, 2008, from <http://www.naa.org/presscenter/searchpressreleases/2008/newspaper-web-site-audience-increases-sixteen-percent-in-third-quarter.aspx> .

*Washington Post Company 2007 Annual Report - 10-K*. (2007, December 31). Retrieved October 21, 2008, from <http://library.corporate-ir.net/library/62/624/62487/items/285032/WPO2007AR.pdf>

Zuckerman, S. (2007, October 21). *SFGate.com Yes, some blogs are profitable - very profitable*. Retrieved September 12, 2008, from [www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/10/21/BUVJSNSTC.DTL](http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/10/21/BUVJSNSTC.DTL)

