

I s s u e 4 2 0 1 3

**Trial and Error:
U.S. Newspapers' Digital Struggles toward Inferiority**

This publication is copyrighted.
Apart from any fair dealing
for the purpose of study,
research, criticism, or review,
as permitted under the
Copyright Act in conjunction
with international copyright
agreements, no part may be
reproduced for any purpose
without written permission of
the publisher.

First edition: 2013
© Copyright 2013. H. Iris Chyi
Servicio de Publicaciones de la Universidad de Navarra
Pamplona - España

ISBN: 978-84-8081-444-7
ISSN: 1695-310X
Depósito Legal: NA 34-2015

Printed by: Gráficas Egúzkiza

Printed in Spain

Issue **4** 2013

**Trial and Error:
U.S. Newspapers' Digital
Struggles toward Inferiority**

H. Iris Chyi

CONTENTS

1. INTRODUCTION	9
2. BACKGROUND: U.S. NEWSPAPERS AND THE CHANGING COMPETITION DYNAMICS	17
2.1. U.S. Newspapers as Local Monopolies	18
2.2. Information Surplus	18
<i>Too Much Information even at the Price of Zero</i>	19
<i>News Losing Attention Share</i>	21
<i>News Becoming a Commodity</i>	22
2.3. The Rise of Aggregators	24
<i>News Aggregators Outperform Newspaper Sites</i>	24
<i>An Ambiguous Relationship Between Newspaper Sites and Aggregators</i>	25
3. MISINFORMED TECHNOLOGY-DRIVEN STRATEGY	29
3.1. The Death Narrative	29
3.2. Theory of Disruptive Technology	31
3.3. The “Newspaper Next” Project	33
3.4. Collective Anxiety and Irrationality during the Recession ..	35
3.5. Problems of Disruptive Technology Theory	40
4. DEMYSTIFY MULTIPLATFORM AUDIENCES	45
4.1. Traditional vs. New Media: Three Approaches	46
4.2. A Typology of Multiplatform Newspaper Audiences	48
4.3. Newspaper Readers in the Local Market: Print, Hybrid, and Online-Only	51
4.4. “Digital Natives” and the “Dead-Tree Edition”	57

CONTENTS

5. PERCEIVED INFERIORITY OF THE ONLINE EDITION	63
5.1. The Performance Gap: An Inconvenient Truth?	63
5.2. Online Edition: The Problem Child	65
<i>Usage: Low Penetration, Low Engagement</i>	65
<i>Preference: Negative Perception</i>	67
<i>Paying Intent: Or the Lack Thereof</i>	68
5.3. Online News: An Inferior Good	69
<i>An Exploratory Focus Group Study</i>	69
<i>Hypothesis Testing with Pew Data</i>	73
<i>Hypothesis Revisited with Pew Data</i>	74
<i>Online Edition Perceived as Inferior:</i> <i>Side-by-Side Comparisons</i>	75
<i>Preference for the Print Format among Future Adults</i>	76
5.4. Why is Online News Inferior?	77
<i>Physical Explanations:</i> <i>The Less-Than-Satisfactory Online Reading Experience</i> ...	78
<i>Psychological Explanations:</i> <i>Online News is Free</i>	79
<i>Biological Explanations:</i> <i>The Power of Tangible Materials</i>	80
5.5. Managerial Implications	81
6. FROM THE WEB TO MOBILE AND SOCIAL MEDIA	83
6.1. The Web and its Broken Revenue Models	83
<i>Online Advertising</i>	83
<i>Paywalls</i>	84

CONTENTS

6.2. Mobile: The Future of News?	87
<i>News Use on Mobile Devices</i>	88
<i>Mobile Advertising</i>	89
<i>Paying for Mobile News</i>	90
6.3. Will Social Media Save Newspapers?	90
7. CONCLUSION	93
7.1. Suggestions for Newspaper Executives	93
7.2. Cultural Implications	97
REFERENCES	101
MEDIA MARKETS MONOGRAPHS SERIES	121

1. Introduction

The so-called “new media” experiment launched by traditional news organizations since the mid-1990s has been going on for nearly two decades. Motivated initially by high hopes for market opportunities, newspaper firms in the United States and other media markets have expended substantial resources digitizing and distributing their content online. However, the performance of these ventures has fallen short of expectations. Technology, once considered an opportunity, has turned into an existential challenge for U.S. newspapers.

Contrary to general impressions, most U.S. newspapers were not slow in adopting Internet technologies for news delivery. The Web did not become publicly accessible until 1991. Soon after Mosaic (one of the earliest Web browsers) was released in 1993, the *Palo Alto Weekly* went online in January 1994 as the first Web-based newspaper. By May 1995, as many as 150 U.S. dailies offered online services—when less than 1% of the U.S. population had Web access (Carlson, 2003). *The New York Times* went online in January 1996, and numerous newspapers followed suit. By 1999, more than 2,600 U.S. newspapers were providing online services (Editor & Publisher Interactive, 1999). However, by 2003, the industry consensus was that no business model had been found (Carlson, 2003). Media scholars also questioned whether online media can survive without a viable model and whether there is value to maintaining digital media when profitability is not achievable (Kawamoto, 2003). These questions pretty much summarized the first decade of online experiments.

The story could have ended there. But the belief in a digital future was so strong that most newspapers continued their online experiments. New technological advances one after another reinforced such belief—the emergence of post-PC devices (e.g., smartphones, e-readers, and tablets), the rise of Web 2.0 technology (e.g., blogs), and the recent staggering

growth of social networks. Every technology looks like *the* next thing, where the future of news lies. At the same time, long-term declines in print circulation quickened, and “death narratives” surrounding the dead-tree edition went viral.

As newspaper firms were amazed by (and obsessed with) each and every digital technology, the recession hit and put many companies in serious financial difficulty. Driven primarily by fear and uncertainties at this stage, newspaper firms acted upon the unchecked assumption about the all-digital future and responded to their financial woes by slashing resources for their print product to continue their incomplete transition online. As a result, almost all newspaper companies have become multiplatform enterprises, managing a cross-media product portfolio that includes every platform such as print, Web, e-readers, smartphones, tablets, and social media, and emphasizing multimedia content such as photos, audio, and video.

But the truth is, most newspapers are stuck between an unsuccessful experiment (for their digital product) and a shrinking market (for their print product). Even more embarrassing is the fact that the (supposedly dying) print edition still outperforms the (supposedly hopeful) digital product by almost every standard, be it readership, engagement, advertising revenue, or paying intent. According to Scarborough, a research firm collecting readership data for the industry, U.S. newspapers reached a total of 67% of American adults through multiple platforms including print, Web, and e-editions during a given week, but the print product alone covered 61% of American adults within the same timeframe (Newspaper Association of America, 2013a), suggesting that the Web edition contributed only 6% of total readers who were non-print, online-only. Additionally, users are not engaged with the online edition—throughout the month of November 2012, an average online reader spent a total of 39 minutes on a newspaper site, which translates into 4.4 minutes per visit—the best in recent years (Newspaper Association of America, 2012c). It is therefore unsurprising that advertisers are less than enthusiastic about placing ads on newspaper sites—the Web edition generated 15% of total newspaper advertising revenue, while the print

edition accounted for 85%, according to data released by the Newspaper Association of America. Note that this is after print advertising revenue dropped dramatically from \$47.4 billion in 2005 to \$18.9 billion in 2012 (Edmonds, Guskin, Mitchell, & Jurkowitz, 2013). To compensate for the substantial loss of print advertising revenue, many newspapers have instituted aggressive price increases on their print product (Edmonds et al., 2013) and erected paywalls around their online content. More than 450 newspapers today are charging users for online news access (News&Tech, 2014), but subscription rates for most local newspaper sites linger in the single digits (Mutter, 2013). Sooner than most had expected, some major metro papers (*The San Francisco Chronicle* and *The Dallas Morning News*) have put an end to their short-lived paywall experiment by the end of 2013. In contrast, more than 44 million Americans are still paying for the dead-tree edition during the week (and 48 million on Sundays) despite recent price spikes (Newspaper Association of America, 2012b). To sum up, after 20 years of trial and error, the performance of U.S. newspapers' digital products remains underwhelming. From a business perspective, despite all the efforts made, newspaper firms have been "exchanging analog dollars for digital dimes" (quoted in Dick, 2009, para. 1).

Even users get confused. A survey indicated that 55% of U.S. Internet users believe traditional media as we know it will not exist in 10 years, even though 67% still prefer getting news from legacy media (Harris Polls, 2010). This discrepancy between what people believe and what they prefer not only illustrates the gap between industry's trajectory and what audiences prefer but also signals a self-fulfilling prophecy in the making. When newspaper executives believe the traditional format is dying, resources allotted for print products will dwindle, resulting in further declines in circulation figures and advertising revenue, which serves as further evidence that the print format is dying. In this vicious cycle (or "suicide spiral"), newspapers will eventually kill their core product through cutbacks and disinvesting (Rosenstiel & Mitchell, 2004). What is at stake is, up till this day (and in the foreseeable future), the print product has been subsidizing the digital edition. In a 2013 study examining the future of print newspapers, a publisher indicated, "Our

website wouldn't exist if we didn't have the print edition, because it wouldn't make no money." On the flip side is a million-dollar question asked by the researcher: "[W]ould the print product exist without the online edition?" "Now that's a good question and one that I'm sure has occurred to everybody in our industry: 'What if we just didn't do it?' We are batting our heads against the wall. All the effort that is going into the website is hurting the print edition. Could we just not do it? I don't know" (quoted in Tennant, 2013, p. 82).

In retrospect, given the scale of this experiment, the newspaper industry could have demonstrated more economic reasoning as opposed to wishful thinking during the process. Unfortunately, that was often not the case. Most U.S. newspapers entered the digital jungle pretty much unprepared. As a result, bad decisions were made, unwise strategies adopted, audiences misunderstood, and product quality deteriorated.

Who's to blame? Traditionally, U.S. newspapers are never known for emphasizing research—they didn't have to. In addition, online publishing has evolved so quickly. Facing a moving target that is difficult to fully understand, newspaper managers outsourced their homework to business consultants, the most influential of whom is Clayton M. Christensen. His disruptive technology thesis (1997) predicts the demise of established products and an all-digital future, and served as the theoretical foundation behind the aggressive-sounding Newspaper Next project, the biggest accomplishment of which, however, was perhaps to intensify the sense of crisis among newspaper workers. The industry discourse has centered on futurism for years—the future of news, newspapers, and newswriters, or the lack thereof—but discussions are often based on quick reasoning by journalists, bloggers, or new media gurus.

What's missing and much needed is a candid, fact-based review of newspapers' digital struggles. However, the inferior performance of the digital product seems to have become an inconvenient truth. "I don't think our industry is honest about the experience on a website," a newspaper publisher said, referring to the page-view game and the ineffectiveness of online advertising (quoted in Tennant, 2013, p. 83).

And the industry is not always open to ideas. A well-known newspaper association, which is supposed to inform its members with research relevant to the state of the industry, once declined to publish a research synopsis they invited me to write, stating: “Your findings show for newspapers moving to digital might not be the best strategy. With so many of our members going the route that John Paton’s Digital First company is, they fear it will appear like we’re knocking that approach.” This anecdote illustrates how “groupthink” might have prevented the industry from making better decisions. It also testifies to the importance of academic research and the role it can play in helping make sense of newspapers’ failing yet still ongoing digital experiment.

Granted, not all scholarly research offers applied value, and when it does, such writings are often scattered in academic journals and thus do not reach practitioners in time (if at all) to have real influence on journalistic practice. Yet the academic setting allows for more time to design a study, analyze data, and identify long-term trends. Most importantly, scholarly work benefits from an independent view—one free from the over-optimistic bias that often sways newspaper managers’ judgment in the decision-making process. Therefore, this book, as a good-faith academic endeavor, seeks to demystify the often misunderstood relationship between old and new media. By synthesizing nearly 20 years of academic research, the goal is to contribute a better understanding of how audiences respond to digital content, a topic we know so little about.

In that sense, this book is not just about U.S. newspapers or their miseries. If we adopt a historical (or futuristic) perspective—such an understanding is crucial to human society at large. Because, confronting the impact of digital technology, we, as a society, eventually will have to determine what to do with old, traditional, analog media forms—newspapers, magazines, and books—all of which have served as important vehicles for content (and culture) for centuries, and the demise (or, if as a result of erroneous decisions or a self-fulfilling prophecy, “unnatural death”) of any will not be without undesirable consequences.

As for how the book is structured: Following this introduction, Chapter 2 discusses two major defining characteristics that have reshaped the overall media landscape. The first is information surplus, which depicts the oversupply of information and predicts continuing, nonstop declines in price in the information marketplace. Also discussed is the rise of online news aggregators—sites such as Yahoo News that have severely eroded the market share of traditional news providers without producing original content. Without fully understanding these factors that have changed the dynamics of competition, discussions about the future of the news would be missing the point. Chapter 3 analyzes why most newspapers, misled by the theory of disruptive technology, responded to these changes by expanding their product portfolio to include all digital platforms at the expense of quality content and their legacy format. Chapter 4 puts forth a “one newspaper, two formats, and four audiences” typology of newspaper readerships and synthesizes nearly two decades of academic and market research which has documented how different audience groups actually respond to news in print and digital formats. Also examined is the influence of age on multiplatform news consumption. Chapter 5 explores the concept of inferior goods and its applicability to online news consumption. It presents a series of empirical studies suggesting that users perceive the online edition as an inferior alternative to the legacy format and offers three plausible explanations—physical, psychological, and biological—for why online news, like ramen noodles, is an inferior good. Chapter 6 discusses the broken revenue models for the Web—the ineffectiveness of online advertising and the recent move to paywalls—and potential problems in recent trends such as mobile and social media. Chapter 7 draws nine conclusions on U.S. newspapers’ digital struggles and presents them as suggestions for newspaper managers hoping to revisit their technology-driven approach. It also goes beyond business strategy to discuss the possibility of print media dying an unnatural death and its profound cultural implications, asking: Will digitization marginalize what used to take time to produce and consume?

I want to thank the University of Navarra, a research hub for media management studies, for offering the opportunity to publish this book.

Without your trust and patience, this project could not have been undertaken. Special thanks go to my research associates, especially those in the Media Economics Research Group at the University of Texas at Austin. It has been a pleasure working with all of you.

2. Background: U.S. Newspapers and the Changing Competition Dynamics

To make sense of the problems facing U.S. newspapers, it is necessary to understand game changers in this new digital landscape, of which the most salient and fundamental involves the intense competition dynamics online. While it may seem obvious that competition is far more intense online than offline, newspaper firms did not seem to always “get it,” as reflected in their collective response to increased competition.

For example, many interpret the quickening declines in print circulation as a sign indicating the death of print media. There is a logical fallacy involved in this kind of thinking. On the other hand, the dramatic oversupply of news and information online does not seem to be taken seriously—instead of securing or pursuing content exclusivity, most jump onto the digital bandwagon, believing the key is to increase audience reach by expanding distribution channels, which leads to the unprecedented, industrywide, and irreversible news commoditization process.

This chapter will first discuss the kind of market in which U.S. newspaper firms used to thrive, followed by a demand and supply analysis illustrating the present and future states of online competition characterized by “information surplus” (Chyi, 2009). In addition, the relationship between newspapers and online news aggregators, which is often ambiguous and its impact thus being either over- or under-estimated in evaluating the competition dynamics, will be reviewed. Altogether, the goal is to present an overview of a harsh reality facing the U.S. newspaper industry and to suggest a rational way of understanding online completion dynamics.

2.1. U.S. Newspapers as Local Monopolies

The United States is the largest media market in the world, yet few of its print newspapers are circulated nationwide. Among nearly 1,400 daily newspapers, only three are national newspapers with nationwide distribution in print: *The Wall Street Journal*, *USA Today*, and the national edition of *The New York Times*. The rest are all local papers serving narrowly defined geographic markets—a U.S. daily newspaper serves an average of 2,972 square miles (Busterna & Picard, 1993). As a result, circulation levels are low. In 2011, the average Sunday circulation was 53,900 and the average weekday circulation only 32,143 (Newspaper Association of America, 2012b). In addition, the majority of U.S. newspapers do not have direct competition in their local markets because most U.S. cities are served by only one newspaper. The number of U.S. cities with competing newspapers dropped from 47 in 1986 to 20 in 2000 (Rodgers, Hallock, Gennaria, & Wei, 2004), with additional contraction since the death of the *Rocky Mountain News* in Denver and the *Seattle Post-Intelligencer* in 2009.

Therefore, most U.S. dailies operate as local monopolies facing minimal competition in the information market for audiences. For example, as of 1998, nearly three-quarters of local residents in Austin, Texas, reported reading the print edition of the local daily *Austin American-Statesman* at least once a week (Chyi & Lasorsa, 2002). In the advertising market, newspapers were also facing limited competition within their local franchise, as early empirical research documented relatively clear market segregation between daily newspapers and national media such as daytime or evening network TV, spot TV or radio, magazines, newspaper supplements, and outdoor (Busterna, 1987). Therefore, “the market shares controlled by metro dailies [were] envied by marketers of other products” (Picard & Brody, 1997, p. 43).

2.2. Information Surplus

While most U.S. newspapers acted as local monopolies in the print world, the competitive dynamics online are very different. The Internet offsets

local newspapers' longtime competitive advantage by transcending geographic boundaries and allowing readers to consume news and information from infinite sources.

Too Much Information even at the Price of Zero

In media history, the growth of media choices has been the norm (Fidler, 1997), and so is the fact that media have always competed for audiences' time and attention. For example, the decline in news consumption started in the 1960s as the first TV generation grew up (Mindich, 2005). And the term "information explosion" (Rudd & Rudd, 1986, p. 304) is often used to refer to a sharp increase in the supply of information since the 1980s.

However, it is the Internet, with its capacity for distributing digitized content at minimal cost, that pushed information supply to a new height—from "information explosion" to "information surplus," from "information abundance" to "information overabundance," from "there ain't no such thing as a free lunch" to "information *has* to be free."

It was pointed out as early as 1998 that the proliferation of online content was challenging the orthodox assumption of scarcity in economics (Ghosh, 1998). Between 2000 and 2003, the amount of new information doubled, and the amount of information on the Web tripled (Varian & Lyman, 2003). And that was before Web 2.0 took off.

Since the Web 2.0 era, the amount of user-generated content has been growing exponentially. In 2007, Technorati, the popular search engine tracking 70 million blogs, reported about 120,000 new blogs and 1.4 million posts being created worldwide each day, and the blogosphere would double its size in about 320 days (Sifry, 2007). YouTube, launched in December 2005, was serving more than 100 million videos per day by mid-2006 (BBC News, 2006). By 2012, more than 4 *billion* videos were viewed each day (Bullas, 2012).

Then the diffusion of social networks on multiple platforms including mobile devices furthered this trend. Each day, on top of the 500 million tweets sent (Twitter, 2013), 300 million photos and more than 500 terabytes of information are added on Facebook (Tam, 2012). The gigantic amount of digital information and the speed at which it is created and distributed have redefined the media landscape.

While the amount of information available online is easily observable, the consequence of this information revolution is not always as clear. The concept of “information surplus,” based on a supply and demand analysis, was put forth in 2007 to describe the state where the amount of information available far exceeds what users can consume even if they want to and even at the price of zero (Chyi, 2009).

Figure 1.1 illustrates the dramatic increase in the supply of information over the past two decades. D is the demand curve, which has remained relatively stable over time because users have only limited capacities to process information given time and attention constraints—that is, 24 hours in a day, 7 days in a week.

S_1 , the original supply curve, represents the level of information supply in the pre-Internet era. Then the first wave of technological innovations brought about by the World Wide Web together with an increasing number of suppliers and the decreasing price of input pushed the supply curve to the right, from S_1 to S_2 . As a result, the price drops from P_1 to P_2 and the quantity demanded increases from Q_1 to Q_2 . In other words, in the new equilibrium, more information is consumed at a lower price.

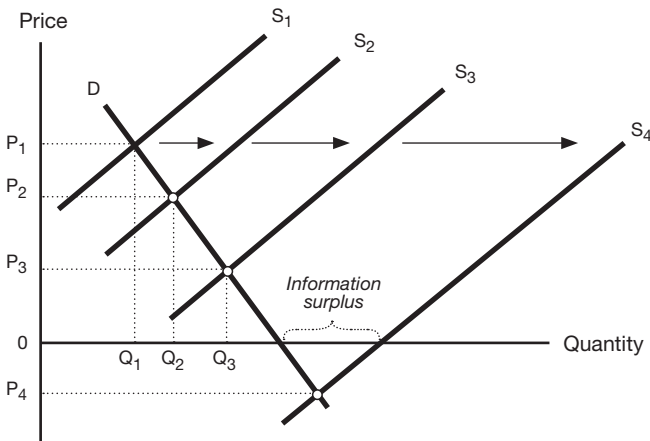
In the subsequent Web 2.0 era, the volume of information that became available to users and the speed at which new information was created and distributed pushed the supply curve further, to S_3 , resulting in an even lower price (P_3) and higher quantity (Q_3).

Finally, the diffusion of social media and mobile devices propelled a similar process in which the supply curve easily reached S_4 . At this point, the amount of information supplied exceeds what users can

possibly consume, causing a surplus of information. The equilibrium price becomes negative—meaning information suppliers can no longer charge users but have to pay them instead. This is already the reality. *Time* magazine, for example, charges \$15 for a one-year subscription, which doesn't cover the mailing costs, and the subscriber receives an electronic weather station clock as a gift, too.

Looking into the future, the supply curve will continue shifting to the right, meaning the gap between information supplied and information consumed will only widen.

Figure 1.1.
Information Surplus



News Losing Attention Share

The first and foremost implication of information surplus is: With all kinds of information readily accessible, news has to compete with everything else—videos on YouTube, music from numerous online radio channels, blogs, Facebook and Twitter—for user attention. Most importantly, this gigantic information mix consists of not only news but also unlimited entertainment content. I often ask my students in class,

“How many movies (DVDs or online) or TV shows (in DVRs or online) do you have waiting to be watched?” They often shake their heads and say, “Hmm ... a lot.” Then I follow up with the second question, “What is more attractive to you guys? News or movies?” They will often pause for a second and admit sheepishly, “Movies.” These are journalism students who aspire to become future news providers, but the appeal of entertainment content is so strong that even they are susceptible to its lure. In other words, although news consumption is often considered socially desirable, news is rarely the most attractive type of content in people’s media repertoire.

In fact, news has never had high commercial value (Picard, 2008), as evidenced by the fact that it has always been cross-subsidized by finance, automotive, home and garden, entertainment, fashion, travel, and classified sections due to the difficulty of displaying contextually relevant ads (Varian, 2013). Everybody was reading hard news (or any news) in the good old days not because they preferred it but because there weren’t nearly as many choices.

Today, given information surplus, the decline in the attention share of any traditional news media is natural and inevitable. News organizations should have recognized the reality and devised strategies to cope with this low-price, high-competition information market. Unfortunately, the decline in print circulation has been misinterpreted by many within and outside the newspaper industry as a sign of its demise. As a result, newspaper firms embraced the seemingly progressive digital model, which has led to excessive news supply, driving the price all the way down to a bottomless pit.

News Becoming a Commodity

While the majority of online users already feel overloaded with the amount of news and information confronting them (Holton & Chyi, 2012), news media organizations worldwide keep producing homogeneous, indistinguishable news content 24/7 and distribute it through a plethora of

platforms—the Web, e-readers, smartphones, tablets, and social media. A search for “iPhone 5” on Google News returned 83,500,000 results in 0.23 seconds, but how many stories contribute anything unique? In a thought-provoking essay, “Why Journalists Deserve Low Pay,” Picard explained why the value of such journalistic work is near zero: “Across the news industry, processes and procedures for news gathering are guided by standardized news values, producing standardized stories in standardized formats that are presented in standardized styles. The result is extraordinary sameness and minimal differentiation” (Picard, 2009b, para. 22). And ironically, given so much news and information flowing around, online adults consider only about one-third of the news content produced by the U.S. mainstream media to be relevant or interesting (A. M. Lee & Chyi, 2013).

Looking into the simple supply and demand analysis on information surplus, it is crystal clear that the solution for news providers does not lie in replicating content on digital platforms; jumping onto the digital bandwagon because everyone else did only makes things worse. To opt out of this disastrous information surplus scenario, content providers should focus on product differentiation—producing unique content that users consider to be noteworthy. However, this is exactly what most traditional news media have not been doing. They have taken a technology-driven approach, focusing on digital distribution channels while downsizing editorial staff and reducing coverage, which has led to further declines in audience share. According to the 2013 State of the News Media report, nearly one-third of Americans have gave up on a particular news outlet because it no longer provides the news and information they had grown accustomed to. Most importantly, quality (reduced thoroughness in stories) far outweighs quantity (fewer stories) as the primary reason cited for leaving a media outlet (Enda & Mitchell, 2013).

In sum, given so much content at the price of zero, media organizations should focus on quality over quantity, exclusivity over homogeneity, genuine “noteworthiness” (A. M. Lee & Chyi, 2013) as opposed to the simplistic “our audience is online, so we are online” mentality to compete effectively in the marketplace.

2.3. The Rise of Aggregators

As if competition were not already intense enough, online news aggregators such as Yahoo News and Google News have further eroded the attention share newspaper firms used to enjoy.

News Aggregators Outperform Newspaper Sites

Since metro newspapers typically provide local, regional, national, and international news, they have a large number of competitors, including sites of local TV channels, national newspapers, and international news outlets as well as online news aggregators. In an early study, when asked to identify their competitors, metro newspaper sites tended to consider “city guide” sites, major search engines’ local versions, or other newspaper sites covering nearby areas as their competition (Chyi & Sylvie, 2000). Yet the real winner turned out to be online news aggregators (e.g., Yahoo News, AOL News, Google News, etc.).

While newspaper firms are struggling with the economics of their digital experiments, online aggregators have become the dominant source of online news for American users at both national and local levels. The biennial media consumption surveys by the Pew Research Center ask regular online news users to name a news site they use most often. In 2006, the most frequently visited news sites were MSNBC (31%), Yahoo (23%), CNN.com (23%), Google (9%), AOL (8%) and FoxNews.com (8%)—none of which was affiliated with a newspaper; the most visited newspaper sites were NYTimes.com and USAToday.com, with each mentioned by 5% of online news users (Pew Research Center for the People & the Press, 2006). In 2008, Yahoo became the leading news site. In 2010, Yahoo was mentioned by 28% of online news users as their most visited news site, followed by CNN.com (16%), Google (15%), and MSN (14%). In comparison, about 11% of respondents mentioned local news sites, 6% mentioned NYTimes.com, and 2% mentioned online editions of the *Wall Street Journal* or *USA Today* (Pew Research Center for the People and the Press, 2010). In 2012, Yahoo remained the top online

news destination, mentioned by 26% of online news users, while 17% named Google or Google News, 14% CNN, 13% local news sites, and 11% MSN. Only 5% named the New York Times, and 2% named the Wall Street Journal, USA Today, or the Washington Post.

While the Pew surveys documented trends at the national level, an empirical study (Chyi & Lewis, 2009) compared the market share of local newspaper sites with that of online news aggregators in the top 100 local markets where comScore Media Metrix collects usage data from its online panelists. Based on the 2006 data, Yahoo News was the No. 1 news site in 53 of the Top 100 local markets, followed by MSNBC (20), AOL News (14), and local newspaper sites (11). In addition, among the top 67 local newspapers (with circulation of 100,000 or above), only 13 ranked No. 1 in their local market. In all the other cases, local newspaper sites were not the leading news source in their home market. In fact, these major local papers' Web editions reached only 15% of Internet users in their local market. These results suggest that, while local print newspapers enjoy monopoly-like status in the local markets, in the online world such market power is gravely diminished mostly due to the rise of news aggregators.

Therefore, to believe that newspapers will gain market power merely by becoming more attuned to the Web is oversimplifying the reality.

An Ambiguous Relationship Between Newspaper Sites and Aggregators

Yahoo News as a news aggregator has no particular local focus, yet it has become the leading online news site in most of the Top 100 U.S. markets. In contrast, local newspaper sites, despite their long-term affiliation with the local market, do not seem to enjoy any advantage when competing with nonlocal players. The question is: Why did newspaper sites lose their local franchise on the Web to aggregators like Yahoo News?

Regarding the dominance of online news aggregators in both national and local markets, newspaper firms should take most of the

responsibility. Although many working in the field have come to see aggregation as a threat to the traditional model of original reporting (Chyi, Lewis, & Zheng, 2013), most newspapers chose to work with aggregators and to provide content in exchange for audience reach or revenue. For example, the Yahoo Newspaper Consortium, an alliance between Yahoo and hundreds of U.S. newspapers, started with seven newspaper chains representing 176 newspapers in 2006 (Helft & Lohr, 2006; Saba, 2006) and has since expanded to include nearly 800 local papers, or 32% of U.S. daily newspaper circulation (The Newspaper Consortium, 2011). Since users may read the stories produced by a newspaper on Yahoo News instead of the paper's own site, such content-sharing diminishes newspaper sites' content exclusivity. In addition, most aggregators and newspaper sites feature content produced by news agencies; for instance, Yahoo, Google and MSN all have licensing deals with the Associated Press for publishing content on their websites (E&P Staff, 2010; Liedtke, 2010). Thus newspaper sites, which produce the original content, are simply delivering a less-than-unique online product from the user's point of view. Using the "department stores vs. stand-alone shops" analogy developed by Huang, Yang, and Chyi (2013, p. 115), all empirical data suggest most online users consume news from established "department stores" (i.e., news aggregators such as Yahoo News).

In other words, it was newspaper firms' managerial decisions that led to the dominance of online news aggregators, which in turn accelerated the process in which news became a low-value commodity. However, instead of rethinking their strategy with partners like Yahoo, some newspaper executives blame Google News, which actually links back to newspaper sites without hosting the news article, for exploiting and profiting from content produced by traditional news media (BBC, 2009; Fraga, 2012; Isbell, 2010). They said Google was a "parasite" (quoted in Schulze, 2009), a "content kleptomaniac" (quoted in Dawber, 2009), a "digital vampire" sucking "newspaper blood" (quoted in Szalai, 2009). Rupert Murdoch also asked, "Should we be allowing Google to steal all our copyrights?" (quoted in Smillie, 2009).

Despite these emotional responses, to this day, U.S. newspapers have not properly defined their relationship with online aggregators. Some argue that “the only thing worse than being aggregated by Google News [is] not being aggregated at all” (Carr, 2012). But in Brazil, a total of 154 newspapers, which account for over 90% of Brazil’s newspaper circulation, have collectively boycotted Google News since 2012 (Fraga, 2012). “By providing the first few lines of our stories to Internet users, the service reduces the chances that they will look at the entire story in our websites,” said Carlos Fernando Lindenberg Neto, president of Brazil’s National Association of Newspapers (quoted in BBC News, 2012). This collective action may safeguard newspapers’ content exclusivity, if not in the long run, then at least in the short run. In Germany and France, legislation that would force Google to pay for featuring headlines and the first few lines of an article is being considered. In February 2013, Google agreed to pay 60 million euros to help French publishers develop their business models and offer French media with advertising opportunity at reduced cost (BBC News, 2013).

But the reality is that Yahoo is the dominant news site in the U.S. market thanks to its partnership with newspapers. While blaming Google News for stealing their content, U.S. newspapers should re-evaluate their content partnership with online news aggregators, Yahoo in particular, or the dominance of aggregators will only continue.

3. Misinformed Technology-Driven Strategy

In response to such unfamiliar, harsh competition dynamics, the newspaper industry took a technology-driven approach, focusing on multiplatform news delivery: “Read the Los Angeles Times on Kindle ... Leave a comment on a blog about media and marketing from the Chicago Sun-Times ... Participate in a discussion board hosted by The Washington Post about college admissions ... Receive SMS news about the Dallas Cowboys from The Dallas Morning News.” Indeed, “it’s hard to find a technology that news organizations don’t embrace” (Picard, 2009a, para. 1).

Despite investments in every one of these digital platforms, research shows that adoption of new devices and platforms is generally restricted to a particular group of people as opposed to the general population (Chyi & Chadha, 2012), and these digital operations’ business prospect is anything but impressive. However, newspaper publishers’ collective mentality has been “We don’t want to look old-fashioned,” (Bykofsky, quoted in Grove, 2013), and their technology-driven approach has largely remained unchanged till this day. As blind as it may seem, this digital strategy is not without a theoretical foundation.

3.1. The Death Narrative

U.S. newspapers’ technology-driven strategy is built upon the belief that digital formats will eventually replace their physical, offline product. Because print newspapers are dying, the thinking goes, they must transition to online to survive, and this belief has been gaining traction over time. Take *The New York Times* as an example. In 2007, when asked whether this prestigious newspaper would still be printed in five years,

its publisher Arthur Sulzberger, Jr. said, “I really don’t know. . . . And you know what? I don’t care either,” adding, “The Internet is a wonderful place to be, and we’re leading there” (Avriél, 2007). That response made the headline. Four years later, in a different situation, a similar question came up. This time Mr. Sulzberger said, “We will stop printing *The New York Times* sometime in the future, date TBD” (Fallon, 2011). As the decline in print circulation and advertizing continued, more newspapers have adopted such “death narratives,” acting on the assumption that their product in the traditional format will die. By 2012, a survey by Reynolds Journalism Institute reported that as many as one-third of U.S. newspapers envision a time when they will stop publishing the print edition (Jenner, 2012).

But the “newspapers are dying” narrative has been a recurring theme in U.S. newspapers’ self-evaluation. Even when newspapers enjoyed sustained growth in advertising and circulation revenue in the 1990s, closures of afternoon papers and the financial difficulties of some metro dailies led many within and outside the industry to the same conclusion (Picard & Brody, 1997). It is not surprising that recent declines in print circulation and the latest recession also resulted in widespread use of death narratives in media coverage, evident in sensational headlines such as “Extra! Extra! Are Newspapers Dying?” (Lieberman, 2009), “How to Save Your Newspaper” (Isaacson, 2009), “The 10 Most Endangered Newspapers in America” (McIntyre, 2009), “Who Killed the Newspaper?” (The Economist, 2006), and “Is There Life After Newspapers?” (Hodierne, 2009). A content analysis of U.S. newspapers’ coverage of their own financial troubles found that more than 1 in 4 stories used references such as “perish, die, dying, kill,” and the overall tone of the coverage was largely negative, indicative of sensationalism and uncertainties about the future (Chyi, Lewis, & Zheng, 2012).

Coupled with the pessimistic view about the fate of traditional media is the commonly held vision about the Internet being where the future lies. Shaping this line of thinking is the concept of “disruptive technology,” introduced by Harvard Business School professor Clayton M. Christensen (Bower & Christensen, 1995). Christensen later revised the concept as

“disruptive innovation” and published *The Innovator’s Dilemma* in 1997, in which he identified a pattern in the business world regarding how large firms often fail to survive technological or market changes.

3.2. Theory of Disruptive Technology

The disruption thesis posits that emerging products based on technology or innovation that are “cheaper, simpler, smaller, and frequently, more convenient to use” (Christensen, 1997, p. xviii) will eventually overtake an existing market (Bower & Christensen, 1995; Christensen, 1997). Implicit in this thesis is the vision of an all-digital future, which provoked collective anxiety in the newspaper industry and guided many newspaper firms’ technology-driven strategy.

According to Christensen (1997), disruptive innovations emerge in new but insignificant markets by presenting a different package of attributes unavailable in existing products. Online products such as digital textbooks, online retailing, and free e-greeting cards begin competing with mainstream, established products (e.g., standard textbooks, bricks-and-mortar retailing, printed greeting cards) and eventually dismantle incumbents in the market. Large companies tend to ignore such competition because the emerging products often only take up a small portion of the market in early stages. Consequently, managerial negligence (or lack of foresight) almost always leads to failure in devising preventive measures against the invasion of disruptive products before they gain momentum and sweepingly take over the market. As for how to respond to the invasion of disruptive innovations, Christensen (1997) offered a number of suggestions:

1. Early entrance into the new market: Once managers identify a disruptive technology, they should determine its significance and start experimenting as soon as possible—which, however, is usually very difficult for established firms, according to Christensen. But managers must act quickly or find themselves entering a market full of powerful competitors.

2. Devaluation of market research on the existing customer base: During the process, market research, according to Christensen (1997), is seldom helpful because no concrete market exists. Managers must personally monitor the progress made by pioneering companies and should not rely on the company's established market research operations.
3. Separation of existing and new business operations: Established firms should create small organizations to experiment with the disruptive technology and should always keep these spin-offs independent from the main organization. Companies must allow managers in the disruptive organization to freely experiment with the innovation, "even if it means ultimately killing the mainstream business. For a corporation to live, it must be willing to see business units die. If the corporation doesn't kill them off itself, competitors will" (Bower & Christensen, 1995, p. 53).

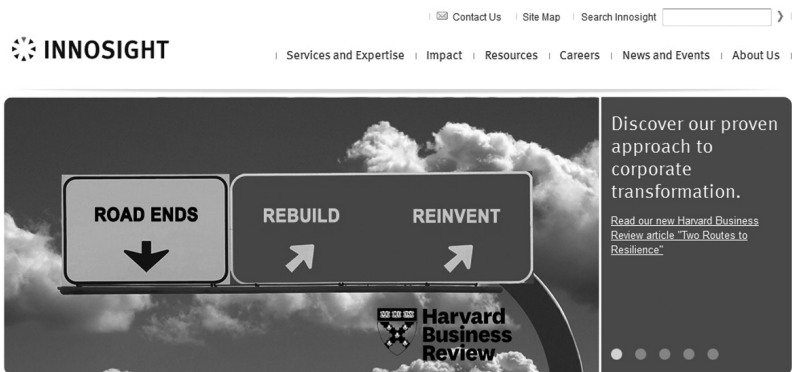
In short, successful companies which do not take quick, determined actions will perish. The prophecy was so compelling (or "scary," Andrew S. Grove, former CEO of Intel, said in a book cover blurb) that it drew substantial attention and became one of the most influential scholarly works embraced by corporate managers in diverse disciplines (Danneels, 2004; Tellis, 2006). And the warning certainly did not go unnoticed in the media business (Silverthorne, 2002).

In 2000, Christensen decided to monetize his insight about innovation and founded Innosight LLC, a business consulting firm. Clark Gilbert, Christensen's student at Harvard Business School and a founding partner of his consulting firm, examined the relevance of the disruptive innovation concept to the newspaper industry in his doctoral work. In an interview, Gilbert indicated that "the [newspaper] industry was clearly facing a threat of disruption, which was not true for all companies facing the Internet" (quoted in Silverthorne, 2002, para. 4). Yet to him, one thing unique about the newspaper industry was its sense of crisis. Unlike established firms in other industries that had no idea what was happening until it was too late, the newspaper industry had recognized and framed

the challenges of the Internet as a threat to their core business, and managers had committed substantial resources to that threat. But Gilbert doubted that newspaper companies were capable of addressing the attack of the Internet, asking, “Does recognizing the threat of disruptive technology enable [newspapers] to overcome it?” (para. 5).

Gilbert’s question might sound pessimistic. But before long, in 2005, Christensen, Gilbert, and their consulting firm, Innosight LLC (Figure 3.1), decided to jump in to save the newspaper industry in a project known as Newspaper Next: The Transformation Project.

Figure 3.1.
Innosight’s Web Site



3.3. The “Newspaper Next” Project

Newspaper Next (a.k.a. N²) is a project undertaken by the American Press Institute (API) and Innosight in September 2005, and its primary aim was to transform the newspaper industry using Christensen’s disruptive technology/innovation thesis as a theoretical framework.

The launch of this transformation campaign was described with a Hollywood blockbuster analogy. Just as in many of those movies a scientist, more often than not in a lab coat, would alert the public of

an impending disaster that is about to wipe out humanity (Ellis, 2011), Christensen played a similar role in his remark to newspaper managers:

A powerful wave of disruption is sweeping the newspaper industry, but it doesn't have to be a disaster. There are at least as many growth opportunities as threats, and companies that learn to think and act like disruptors can not only survive but prosper. The Newspaper Next approach gives them the tools they need (quoted in American Press Institute, 2006, p. 2).

Similar rhetoric came from Clark Gilbert:

These are scary times for newspaper veterans. Hardly a day goes by without news about disappearing readers, shrinking revenues, declining stock prices, or looming layoffs. ... The bad news is that when the dust of disruptive change settles, historically even the best-run companies typically end up in the loser's column. ... There is good news: Lessons learned from past failures can help to ensure future triumphs. Even better, newspaper companies have real assets to bring to this fight, and a number of emerging industry experiments with new products and business models could point the way towards future success (Anthony & Gilbert, 2006).

Central to the Newspaper Next project is a 98-page report, "Blueprint for Transformation," released by the API in fall 2006. This project, built on Christensen's theoretical framework, aimed (perhaps overly) ambitiously "to develop the innovation tools and processes newspaper companies would need to reverse course from decline to growth—a practical method that API could teach" (American Press Institute, 2006, p. 4). The report itself offers some general suggestions for developing business strategies (e.g., spot opportunities, develop solutions, evaluate ideas, and design tests), followed by a "game plan" targeting four areas (core products, audiences, advertisers, and organization structure) and seven case studies from seven newspaper companies (American Press Institute, 2006). The second report, "Newspaper Next 2.0: Making the Leap Beyond 'Newspaper Companies,'" was released in early 2008, building upon the first report and offering

additional strategic advices to newspaper firms and examples from more than 30 case studies (American Press Institute, 2008).

The entire project, with an expense estimated at \$2 million (Ellis, 2011), attracted the attention of many in the newspaper industry. Steve Buttry recalled that he and his colleagues at the API made more than 100 presentations to newspaper executives, managers, sales reps, and journalists at industry conferences, seminars, and workshops throughout North America, promoting the solutions outlined in the Blueprint report (Buttry, 2011). At least 4,000 executives representing hundreds of newspapers attended the all-day workshops, and many more attended presentations at conferences or downloaded the reports (American Press Institute, 2008).

As Ellis (2011) indicates, many newspapers did experiment with different new platforms in trying to reach customers who don't belong in the existing traditional market, as suggested by Christensen and his consulting firm. But the profound impact of the project is probably psychological. Inundated by the abovementioned fear appeals from Christensen et al., most newspaper publishers as well as media gurus were convinced that the industry should allocate more resources to digital operations, de-emphasize print, and break existing business models. As Carol Ann Riordan, API's vice president of programming during the Newspaper Next campaign, put it, "We didn't want to look at this as a standalone event or standalone report. We really wanted to make it the DNA of everything we do at API" (quoted in Ellis, 2011). Although most people—participants, observers, and critics alike—found the results of the project disappointing (Buttry, 2011; Ellis, 2011; Jarvis, 2006), it is fair to say that industry discourse surrounding disruptive innovation has successfully implanted the vision of an all-digital future into the industry's DNA.

3.4. Collective Anxiety and Irrationality during the Recession

It is therefore not surprising that, when the 2008 recession forced newspaper firms to reduce costs, most decided to slash resources on the

print side but continued investing in their Web and other digital ventures. According to Paper Cuts (2013), a website that tallies newspaper layoffs and buyouts, in 2008 nearly 16,000 newspaper jobs disappeared. By the end of 2009, nearly 15,000 more newspaper employees had lost their jobs. By 2012, the number of full-time professional editorial employees hit 38,000, a record low since 1978 (Guskin, 2013). To cut the cost further, many newspapers, including *The New York Times*, reduced pages or dropped sections from the paper (Pérez-Peña, 2008); others, such as the *Detroit Free Press*, the *Detroit News*, and more recently the *New Orleans Times-Picayune*, eliminated home-delivery on certain days of the week (Tennant & Chyi, 2014).

What happened to the newspaper industry during the economic recession provided further evidence regarding the death of the print media anticipated (and even promoted) by disruptive innovation theory, pushing the collective anxiety to a new height. However, such fear-induced mentality was largely irrational, as evidenced by newspapers' coverage of their own financial struggles during the recession. A typical news article on newspapers' financial troubles looks like this (Lieberman, 2009):

About 80% of newspaper revenue comes from advertising, and the Newspaper Association of America expects those sales to drop 9.7% in 2009 to \$34.2 billion, after falling 16.5% in 2008.

“Advertising has fallen off a cliff,” says Randy Bennett, senior vice president of business development at the NAA. “The question is how much of that will come back when things pick up again. And the expectation is, certainly not all of it.”

Almost everyone agrees that newspapers must reinvent their business models. Experiments include The New York Times' plan to enlist journalism students to help cover some neighborhoods in Brooklyn and New Jersey. The East Valley Tribune in Mesa, Ariz., recently began to offer free home delivery four days a week to neighborhoods with families that appeal to advertisers.

Some experts say that it's time to consider extraordinary measures, including government bailouts, to ensure that no community has its newsrooms go dark.

"We need to view journalism in the same way that we view libraries and public schools, as absolutely essential to any prospering community," says Theodore Glasser, professor of communications at Stanford University. "A lot of good stuff is published by newspapers so that public officials see it and act accordingly. That's the power of the press. And that's the first thing being cut."

Others say not to worry: The Internet and the market will empower professional journalists, bloggers and interest groups to independently provide all the local news anyone could want.

"There's going to be an ecosystem, a network of different players involved in news for different reasons," says Jeff Jarvis, who runs the City University of New York's interactive journalism program.

Traditional newspapers won't be part of the mix, though: They "aren't willing to cannibalize and disrupt themselves," Jarvis says. "It's too late. ... It's going to be a post-Armageddon rebuilding."

In a study that systematically examines major U.S. newspapers' coverage of the newspaper "crisis" during 2008-2010, Chyi, Lewis, and Zheng (2012) discussed several key economic and financial indicators determining the health of the newspaper industry and assessed the quality of newspaper coverage against those indicators. Overall, they found such coverage did a poor job in using media economics data and failed to present a holistic portrayal of newspapers' financial troubles. Some highlights of their findings:

1. Regarding **circulation**, the most-watched indicator of newspaper demand, most articles focused on short-term changes. However, the decline in print circulation is nothing new. Newspaper circulation has been decreasing since 1987 (weekday) and 1993 (Sunday)

despite a growing U.S. population (Newspaper Association of America, 2012b). Within a longer timeframe, newspaper penetration has declined steadily at 1-2% each year since 1950 (Picard, 2008; Picard & Brody, 1997). In a recent speech, Hal Varian, Google's chief economist, also pointed out that newspaper circulation reached its peak in 1972, suggesting that most of the decline in circulation was due to competition from other media such as broadcast TV news and cable news and that the Internet was influencing only the last few years (Varian, 2013).

2. Regarding **revenue**, newspaper coverage also tended to focus on short-term changes (or declines) in advertising revenue and ignore long-term trends. While newspapers did lose a tremendous amount of print advertising revenue in 2008 and 2009, such revenue reached an all-time-high in 2000 at \$49 billion (Newspaper Association of America, 2012a), which, according to Picard (2008), is two and a half times as much in real value as in 1950. In other words, the industry was in a hyper-performance period before the recession hit, which makes the effect of recession look worse than it is. In addition, advertising, which once accounted for as much as 85% of total revenue (Picard, 2002),¹ is not necessarily the dominant revenue source for today's newspapers. This is because many newspapers have raised the price of single copies and subscriptions significantly, and such moves have reduced newspapers' reliance on advertising. For example, *The Dallas Morning News* raised its seven-day home delivery rate from \$21 to \$30 and then to \$33.95 per month. It also raised the price of single copies from 75 cents to \$1 on weekdays and from \$2 to \$3 on Sunday (Case, 2009). As a result, advertising accounted for 54% of total revenue for *The Dallas Morning News* in 2011, down from 78% in 2007. In contrast, the share of circulation revenue

1 Some 65-75% of revenue comes from display ad sales and 20-35% from classified ads.

went up from 18% in 2007 to 39% in 2011, and that of production and distribution increased from 4% to 7% in 2011 (Tennant, 2011).

3. Regarding **profitability**, the study documented the extensive use of loss or profit statistics in newspapers' self-coverage during the recession, with an emphasis on recent losses, as expected. But overall, the newspaper industry has been a highly profitable business, with a profit margin reaching 25-35% in the 1990s (Picard, 2008). Even after the recession, the newspaper industry as a whole remains profitable. In 2011, the industry reported an average profit margin of 5%, compared with 6% for the S&P 500 companies (Soloski, 2013).

In addition, U.S. newspapers' self-coverage did not provide much contextual information. For example, relatively few articles distinguished different types of newspapers. The truth is, large metro dailies felt the recession more sharply. The majority of smaller papers, in contrast, remained relatively healthy (Ahrens, 2009; Tennant, 2013). Moreover, the trend of closure of second newspapers in local markets preceded the recent "crisis" (Rodgers et al., 2004), and such closures have actually contributed to newspaper profitability overall (Picard & Brody, 1997). In addition, the newspaper industry is not the only medium suffering from a shrinking audience; other media, broadcast TV in particular, have lost more of their audience (Farhi, 2008)—during the past three decades, network evening newscasts have lost about 1 million viewers per year, with total viewership dropping from 52.1 million in 1980 to 22.3 million in 2009 (Pew Project for Excellence in Journalism, 2010). Also, newspapers were not the only industry hit hard by the recession, and newspapers in many other countries continued to thrive (Levy & Nielsen, 2010). In short, the problems facing U.S. newspapers were not as dramatic or universal as newspaper journalists have assumed (Chyi et al., 2012). As for why newspaper journalists overreacted and exaggerated the "crisis" facing their industry, the answer lies in the sourcing patterns that privileged the views of newspaper management over external research or readers by a wide margin; managers genuinely believed that their industry was dying because the Internet was disrupting their dinosaur business, or so were they told.

This unprecedented anxiety was contagious. Soon, even those outside the industry started worrying about the future of the newspaper and how to *save* it. For example, John F. Kerry convened a Senate panel on the future of journalism in 2009, at which he called newspapers an “endangered species” (Miga, 2009). Later that year, the Federal Trade Commission (FTC) held a workshop to explore “how the Internet has affected journalism” (Federal Trade Commission, 2009) and whether the government should support struggling newspapers through cross-ownership deregulations and special tax treatment (Kendall & Catan, 2009).

To sum up, while some newspapers’ financial troubles were certainly real (for a detailed account of the causes of those troubles, see Soloski, 2013), framing them in the “life and death” terms was exaggerating the situation. As Robert Picard indicated, publishers and journalists “are running around arguing the sky is falling. And they’re making the situation appear far worse than it is” and thus became their own worst enemy (quoted in Lieberman, 2009, para. 9). Indeed, newspapers covered the “crisis” of their industry much more than television news outlets covered theirs (Roodhouse, Delli Carpini, Lee, & Venger, 2009). The conclusion is: part of the newspaper “crisis” was constructed by newspapers themselves, and such irrationality was obviously rooted in fears, exemplifying the strong influence of Christensen’s theory imposed upon newspaper practitioners through projects like Newspaper Next. The good news is, as of 2014, all of the “10 most endangered newspapers”—the *Philadelphia Daily News*, the *Minneapolis Star Tribune*, the *Miami Herald*, the *Detroit News*, the *Boston Globe*, the *San Francisco Chronicle*, the *Chicago Sun-Times*, the *New York Daily News*, the *Fort Worth Star-Telegram*, and the *Cleveland Plain Dealer*—are still up and running.

3.5. Problems of Disruptive Technology Theory

As compelling and influential as is, Christensen’s disruptive technology/innovation thesis has a number of weaknesses, raising questions about its clarity, its predictive power, and its generalizability.

From a theoretical perspective, scholars questioned the definition of disruptive technology, or the lack thereof (Danneels, 2004; Tellis, 2006). In a comprehensive critique, Danneels (2004) asked a long list of questions, including: what makes a technology disruptive, how to identify a disruptive technology, whether a technology is inherently disruptive (or subject to the perceptions of the firms confronted), and at what point in time a technology becomes disruptive (only when it displaces market incumbents?). These questions suggest the vagueness of the key concept in that theory. In addition, Danneels points out that while Christensen stated that “disruptive technologies are usually simpler, cheaper, and more reliable and convenient than established products” (quoted in Danneels, 2004, p. 249), these characteristics may not be necessary, defining characteristics of disruptive technology.

In addition, Christensen did not justify how and why he chose the cases presented in his book (Tellis, 2006), all of which (unsurprisingly) supported his argument. This led to doubts about the predictive validity of his theory. Danneels (2004) asked whether it is possible to tell if a technology will be disruptive, *ex ante*. This is a legitimate question because Christensen’s argument is based on historical case studies, but “hindsight is always 20/20” and “the real challenge to any theory, especially if it is to be used managerially, is how it performs predictively” (Danneels, 2004, p. 250). Other criticism includes the arbitrary pairing up of a disruptive technology and an established technology as well as the overgeneralization that the former will replace the latter. In criticizing Christensen’s argument that microcomputers as the cheap, inferior, disruptive technology eventually supplanted the minicomputer, technology writer John Dvorak said, “The microcomputer was never a ‘less expensive’ and ‘inferior’ replacement for minicomputers. It was a more expensive and superior replacement for calculators and slide rules. It was never used ‘instead of’ a minicomputer (or mainframe for that matter) but ‘in addition to’” (Dvorak, 2004). Given the central argument presented by Christensen is the disruption of established firms by technological changes, the lack of predictive tests makes it problematic to even consider his thesis a “theory.”

Another major issue concerns the theory's generalizability. Based on case studies of certain industries (e.g., the hard disk drive industry and the mechanical excavator industry), the theory was extended to describe and predict technological changes in many other areas such as online banking, retailing, and media industries, raising concerns about its external validity (Danneels, 2004).

The applicability of the disruptive innovation theory in media industries is indeed questionable. Around the same time Christensen's book *The Innovator's Dilemma* came out, Roger Fidler released a different view on the evolution of mass media in his book *Mediamorphosis: Understanding New Media*. Also working from historical observations, Fidler (1997) points out that the relationship between any new and existing media is characterized by "coevolution and coexistence rather than sequential evolution and replacement" (p. 24). In addition, each new form of communication has evolved from its origins as a recognizable extension of an earlier form into a distinct form. It takes time for a new medium to cross this "bridge of familiarity" to achieve creative uses (p. 16). Going back further in time, as early as 1913 Wolfgang Riepl, a German newspaper editor, suggested that new, advanced types of media never replace the existing modes of media. To date, this rule of thumb, known as Riepl's law, still holds true (De Waal & Schoenbach, 2010). Both Fidler's mediamorphosis thesis and Riepl's law, although not as "scary" as Christensen's prophecy, provide an alternative view on the course of media revolution.

Despite the failure of the Newspaper Next project, Christensen and Clark Gilbert have remained active at conferences, reiterating the disruptive innovation approach with a more critical voice. In March 2011, Christensen addressed a conference attended by media industry leaders, suggesting that traditional firms often look toward easy solutions to their problems, but change emerges from a forward-looking way of thinking about a company's future as opposed to simply projecting out from historical data about performance. Once again, he suggested media firms create completely independent digital operations, saying that hybrid products often ended in failure by trying to maintain legacy businesses

while experimenting with innovations (Glenn, 2011). His view was echoed by his former student Clark Gilbert during the same conference, who became the CEO of Deseret Media in Salt Lake City: “The second you think there is a hybrid relationship, good luck with that, because it is just not going to work” (quoted in Glenn, 2011).

Most recently, in the keynote speech at the 2013 International Symposium on Online Journalism, Gilbert said only 9 percent of companies survived the challenge of disruptive innovation. Talking about the Newspaper Next project, he said that surprisingly few newspaper firms followed their counsel about setting up a separate business, blaming the incumbent business for seeing the world through the lens of their existing business and for failing to see the new, unique opportunity of disruptive innovation “even though that may be obvious to everyone else” (Gilbert, 2013).

Gilbert’s hindsight reminds me of Jeff Jarvis’s criticism of the Newspaper Next project back in 2006, “They’re trying to reshape newspapers but I think they should be more aggressive and imagine the world after newspapers and figure out how to get news there. They need to get out there and work with the nonnewspaper people” (Jarvis, 2006, para. 2). In the same post, Jarvis complimented Rupert Murdoch’s innovative approach—acquiring MySpace. As opposed as Jarvis and Gilbert may seem, both blame newspapers for not being progressive enough. And most interestingly, the industry, so lost in its own digital ventures, chose to embrace such progressivism even more.

Against this backdrop, the progressive-sounding “digital first, print last” strategy attracted substantial attention in the post-recession era. John Paton, CEO of the Journal Register Company, in explaining the gist of his approach, said, “Stop focusing on print,” “Focus on the future and the future is not Print,” “Stop listening to Newspaper people. We have had nearly 15 years to figure out the web and, as an industry, we newspaper people are no good at it. No good at it at all. ... And, I would point out ... put the Digital people in charge—of everything” (Paton, 2010).

At this point, nothing is easier than blaming newspaper firms for not having acted more aggressively. Yet, what if newspapers were indeed more aggressive (whatever that means)? What if the fault is not in the newspaper industry but in Christensen's theory and its impracticality? While the digital music model was often perceived as a success, when did we see a music label successfully transform itself into a technology firm? Given the size and the local nature of typical U.S. newspapers, it is unrealistic to expect them to transform from the content business into the technology business or to compete effectively with online giants such as Google or Yahoo without taking industrywide actions. The truth is, as noted in the 2011 State of the News Media report, multiplatform newspaper firms have become increasingly reliant on aggregators and social networks to help draw audiences and must follow the rules of platform owners to get their content delivered. What's worse, each new player takes a share of the revenue and, in most cases, also controls audience data (Rosenstiel & Mitchell, 2011).

To sum up, struck by the promise of the Internet and the (actually inevitable) decline on the print side, the newspaper industry mistakenly picked up a "life and death" frame and devised a seemingly progressive strategy that emphasizes technology but ignores fundamental aspects of their business (such as content and audience demand). In Dvorak's words, "One problem in our society is the increasing popularity of false-premise concepts that are blindly used for decision making" (2004, para. 12). Yet strategies should be based on rational economic analysis as opposed to guesswork or wishful thinking.

4. Demystify Multiplatform Audiences

Frankly, for a revolution that is so profound and moves at such a rapid pace as we've witnessed during the past 20 years in digital media, no one, not even experts or the most intelligent visionaries, could have completely foreseen its path. The only way to learn about what's going on in the market is through trial and error and accumulating empirical evidence along the way, hoping that a clearer picture will emerge eventually. In other words, the industry would have benefited the most from inductive research—start with observations, collect data, detect patterns, and eventually develop generalized conclusions guiding managerial decisions.

The Newspaper Next approach, however, is largely deductive. The newspaper industry outsourced its homework to some theorists, who deductively designed a blueprint for the future, but the chance of making mistakes is high.

Granted, most local newspapers in the U.S., with monopolistic power within their geographic market, were never very serious about audience research (Lowrey, 2009), which is justifiable based on microeconomic theories. What's surprising is that when confronted with technological challenges and intense competition, newspaper firms have not become much more customer-oriented.

Coincidentally (or not), Christensen (1997) explicitly suggested established firms not rely on market research because “most marketers ... have been schooled extensively, at universities or on the job, in the important art of listening to their customers, but few have any theoretical or practical training in how to discover markets that do not yet exist” (pp.165-166). He went so far as to say incumbent firms are “held captive by their customers” and therefore miss the boat on disruptive technology

(quoted in Danneels, 2004). Perhaps his intention was to encourage established firms to focus on future customers, but there is no reason a company should drop current consumers while exploring new ones.

Regardless of why audience research hasn't been guiding U.S. newspapers' digital strategy, the truth is, most newspaper firms have failed to retain their once-substantial reader base in print (Edmonds et al., 2013), nor have they developed a self-sustaining business model online (Hindman, 2011; McDowell, 2011). Yet empirical research about the economics of online news does exist. Specifically, media scholars and research centers have been keen observers of the online news business, and their approach is largely inductive, free from the overoptimistic bias often seen in newspaper managers' decision-making process. Despite the difficulty in accessing audience data from media firms, they have examined how news audiences respond to emerging news platforms since the mid-1990s and have produced a body of knowledge regarding audiences' preferences, use, and paying intent for digital news that carries managerial implications. This chapter revisits and synthesizes these research findings, hoping to make sense of U.S. newspapers' online experiments and provide a framework for future research on the economics of online news.

4.1. Traditional vs. New Media: Three Approaches

Media scholars have long been interested in studying the interaction of traditional and online media, but not all approaches aim at addressing problems confronting multiplatform media firms' day-to-day operations. Some studies—for example, those driven by communication theories such as uses and gratifications—generate limited applied value and are outside the scope of this book. What's relevant here are mostly media economics studies that carry practical implications. Since they adopt different analytical approaches, here is a brief review of each.

First, a great amount of research examined the displacement effect between online and traditional news media at the individual level—

whether individual users spend less time on traditional media because of new media (Dimmick, Chen, & Li, 2004; P. S. N. Lee & Leung, 2008). Some general findings include: During the startup period for Internet use, respondents did not spend significantly less time with newspapers (Bromley & Bowles, 1995); Internet users were more likely to be newspaper readers (Stempel & Hargrove, 1996; Stempel, Hargrove, & Bernt, 2000); online news readers were more likely to read newspapers than non-Internet users (Tewksbury, 2003); and online news users interested in specific content areas were more likely to follow news in the same categories on traditional media than non-users (Dutta-Bergman, 2004). Overall, these studies suggested that Internet users are more likely to read newspapers than non-Internet users. But one methodological difficulty in displacement-effect studies is that researchers often have to measure media use in general terms—e.g., asking respondents about general newspaper use without specifying which newspaper(s). This is especially true when a study analyzes data collected through national surveys (like those conducted by the Pew Research Center) because, with nearly 1,400 daily newspapers circulated in the U.S., it is methodologically challenging to name specific local newspapers in a questionnaire, which makes it difficult to observe users' response to various product offerings under one newspaper brand.

To address this issue, some researchers took a more specific approach, by examining the demand relationship between a newspaper's online and print editions. The goal is to determine whether the two products are substitutes or complements in economic terms—meaning, other things being equal. The most extensive investigation of this kind is perhaps the study by Gentzkow (2007). Based on a regression model that includes as many as 15 predictors,² the researcher concluded that *The Washington Post* and *washingtonpost.com* are substitutes, if all relevant factors are controlled for, although the magnitude of the crowding-out effect is relatively small compared with some earlier predictions. Despite a

2 Age, gender, education, income, employment-related variables, political orientation, Internet access at work, use of Internet for work-related or education-related tasks, high-speed Internet access at home, etc.

fairly comprehensive model, this study focused on one single newspaper, thus generalizability remains an issue. In addition, even if the overall relationship between two products can be defined by calculating cross-price elasticity of demand, how consumers utilize two related products is often more complicated than what a single number would suggest. For example, music can be consumed in CD or MP3 formats. When people download a song instead of buying a CD, the two products are substitutes. But when they buy a CD after first acquiring one of its songs online, they are complements (Hoskins, McFadyen, & Finn, 2004). And the same complexity characterizes the relationship between a newspaper's Web and print editions, because similar information is published in two formats under one newspaper brand.

A third approach for studying multiple product items in a newspaper's cross-media portfolio is to simply enumerate demand for individual newspapers' online and print products in a well-defined geographic market. Thus the unit of analysis moves away from individual users to newspapers, allowing for a holistic examination of the newspaper market that carries managerial implications. A number of studies have used this approach to clarify the demand relationships between a newspaper's online and print products (Chyi, 2006; Chyi & Huang, 2011; Chyi & Lasorsa, 1999, 2002). Conducted in different media markets over time, these studies have identified consistent patterns characterizing consumer demand for online and print products under one newspaper brand. Before we revisit and synthesize such research findings and discuss managerial implications, the following section conceptualizes newspaper firms' challenge in managing cross-platform products and presents a typology for understanding their multiplatform audiences.

4.2. A Typology of Multiplatform Newspaper Audiences

As most newspaper companies have evolved into multiplatform media enterprises, distributing content through multiple platforms and devices (Albarran, 2010), many face challenges managing multiple news products under the umbrella of one newspaper brand. This challenge in "product

portfolio management” arises when a firm introduces more than one product into the market. To successfully manage a cross-media product portfolio, media companies must analyze and adapt it to changing market conditions, identify primary products and secondary ones based on market share and market growth, and focus resources on those that are most important to the company (Picard, 2005).

With multiplatform products come multiplatform audiences. Given the challenge in managing a cross-media product portfolio, one would think newspaper firms would develop sophisticated tools to better understand their multiplatform readerships, that is, to *zoom in* and scrutinize different audience segments and how they respond to different product offerings. However, that doesn’t appear to be what U.S. newspapers have been doing. When facing market complication, they opt for market simplification (Chyi, Yang, Lewis, & Zheng, 2010). For example, the Audit Bureau of Circulations introduced the “combined online and print audience” metric in 2007 (Audit Bureau of Circulations, 2007; Project for Excellence in Journalism, 2006), which emphasizes newspapers’ overall multiplatform reach and creates the impression that their overall audience is growing without highlighting print-side deficiencies (Edmonds et al., 2013). While combining online and print readerships may impress advertisers in the short term, it is conceptually problematic because one cannot assume each online user delivers the same value as a print reader. In fact, analysts estimated that it takes several dozen or even more online readers (Brook, 2006; Patterson, 2007) to substitute, in terms of advertising revenue, for the loss of a single reader of the print edition. In other words, not all readers are created equal.

To better analyze multiplatform newspaper audiences, this chapter presents a typology that defines four distinctive user groups who constitute any newspaper’s multiplatform readership. The first step is to distinguish local from distant users.

In the pre-Internet era, a local newspaper served local readers within a geographic market with one single product (in print). Online, a newspaper technically transcends physical market boundaries to reach readers

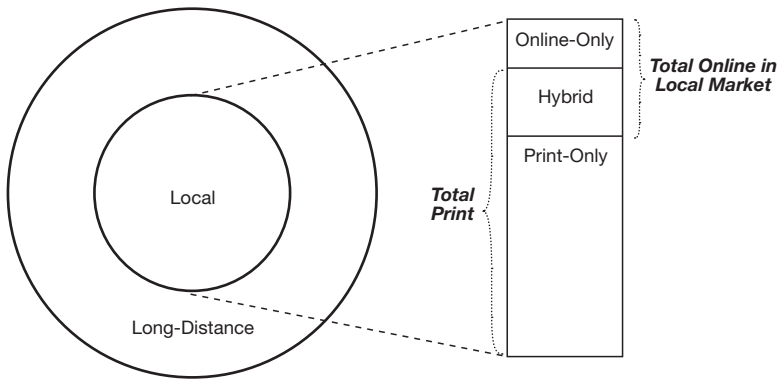
outside the print market. These “long-distance users” constitute a unique, non-print readership (Chyi, 2011; Chyi & Sylvie, 1998, 2001, 2010a).

Within the local market, a newspaper serves local users, who, unlike out-of-the market users, have ready access to their local newspaper in both print and online formats. Among local users, one may further distinguish between 1) print-only users, 2) online-only users, and 3) hybrid users, who regularly access their local paper both in print and online.

Based on these distinctions, a typical newspaper serves four types of audiences. Figure 4.1 illustrates the “one newspaper, two formats, and four audiences” typology of newspaper audiences in print and online, which serves as a handy framework for analyzing the appeal of the two different newspaper formats among four different reader groups.

Figure 4.1.

Typology of Newspaper Audiences Online and in Print



This typology helps make sense of Christensen’s suggestion for the newspaper industry. His thesis suggests that disruptive technology usually starts in an emerging market (as opposed to the existing, mainstream market), so incumbent firms should focus on future customers as opposed to current ones. However, since most U.S. local newspapers enjoyed near monopolistic power in the pre-Web era as the single newspaper in town,

servicing the majority of people in the local market, the “future customers” include 1) people who do not read the newspaper at all—but during the heyday of the local newspaper there weren’t that many to begin with, 2) online-only readers, who have been the minority in the local newspaper market as research shows, and 3) long-distance users, who are truly new, unexplored customers delivered by Internet’s boundary-transcending capacity—but this opportunity is often ignored by newspaper firms because of their local mentality (Chyi, 2011; Chyi & Sylvie, 1998, 2001, 2010a).

This typology defines a multiplatform newspaper’s four audience groups and has been guiding research on newspapers’ online readerships. Regarding the between-group differences, one study using online survey data collected by Belden Associates from 28 U.S. local newspaper sites’ more than 25,000 online users compares local and long-distance users in terms of demographics, Internet and site use, and satisfaction with the newspaper site. Long-distance users account for more than a quarter of these newspaper sites’ online users. Compared with local users, long-distance users tend to be male, older, better-educated and with higher income, more likely to access local sports information from the site, but less likely to visit the classifieds areas. They are also more loyal to and satisfied with the newspaper site (Chyi & Sylvie, 2010a).

Another study compares hybrid and online-only users from the same standpoints (Chyi et al., 2010). Hybrid users outnumber online-only users 2-to-1 and are much more likely than online-only users to use the newspaper site to get breaking news, entertainment, local sports, buy/sell classifieds, job ads, car ads, and real estate information. In other words, hybrid users are more active users of the Web edition. For a side-by-side comparison of all three groups, see Chyi et al. (2013).

4.3. Newspaper Readers in the Local Market: Print, Hybrid, and Online-Only

From the media management standpoint, nothing is more important than understanding your audiences, because their response to your

different product offerings indicates which product is the “cash cow” and which is the “problem child” (Picard, 2003, 2005). Existing research findings regarding newspapers’ multiplatform readerships have revealed consistent, alarming patterns over time, which shed light on U.S. newspapers’ digital struggles.

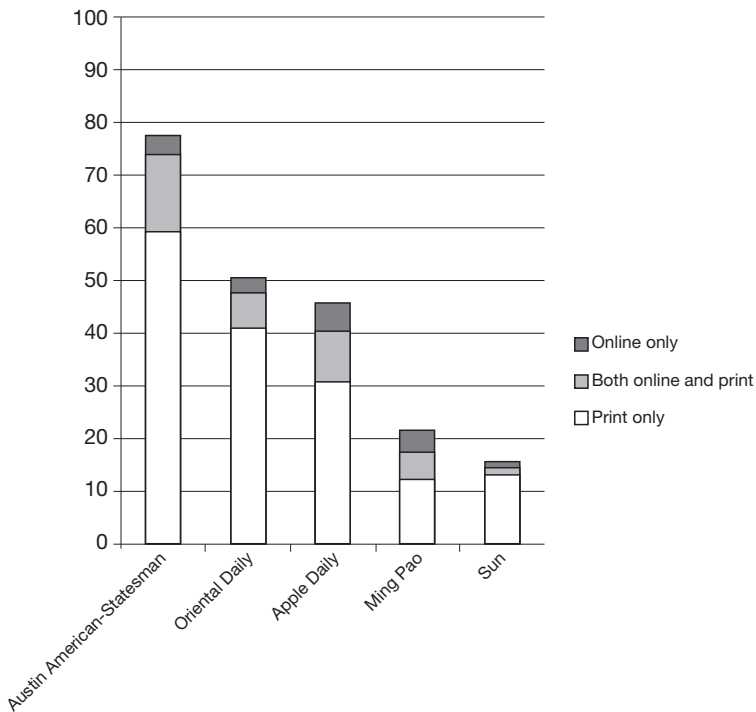
Early research conducted in the late 1990s (Chyi & Lasorsa, 1999, 2002) identified three noteworthy patterns regarding newspapers’ online and print audiences *in the local market*: 1) A local newspaper’s print penetration is higher than its online penetration—that is, print users outnumber online users; 2) The majority of a newspaper’s online readers also read its print edition—that is, hybrid users outnumber online-only users; 3) Compared with the general public, readers of the online edition are more, not less, likely to read the same newspaper’s print edition.

Specifically, a random-sample telephone survey of more than 800 residents in 1998 in a local U.S. newspaper market, Austin, Texas, documented the following: 1) About three-quarters (74%) of local residents reported reading the print edition of the local daily, the *Austin American-Statesman*, at least once a week. In comparison, only 18% visited the newspaper’s Web site, known as Austin360.com at the time, at least once a week. Initially, the gap between online and print readerships was not considered surprising (not even by the researchers themselves) given the Internet penetration (65%) at the time of the study. 2) The online and print readerships had significant overlap: As many as 83% of that paper’s online users also read the its print edition. 3) Print penetration among readers of the online edition (83%) exceeded print penetration among the general public (74%), suggesting that, compared with the general public, online readers were actually more likely to be readers of the print edition (Chyi & Lasorsa, 2002).

Empirical evidence confirming these findings came from non-U.S. newspaper markets as well, first in Hong Kong, where more than a dozen daily newspapers compete for readership online and offline. A random-sample telephone survey in 2002 examined major newspapers’ online and print readerships adopting the same measure used in the Austin study:

Respondents were asked whether they had read a newspaper's online and print editions during the past week. This study (Chyi, 2006) produced strikingly similar findings: The top four Hong Kong newspapers' print penetration was much higher than their online penetration, and most readers of the Web edition also read the same newspaper's print edition (70% for the *Oriental Daily*, 62% for *Apple Daily*, 56% for *Ming Pao*, 53% for the *Sun*)—that is, hybrid users outnumbered online-only users. Figure 4.2 illustrates the findings from both studies side by side.

Figure 4.2.
Newspaper Penetration Among the General Public (%)



Source: Chyi and Lasorsa (2002) and Chyi (2006)

In addition, print penetration was significantly higher among readers of each newspaper's online edition across the five newspapers in both studies (Table 4.1), suggesting that a newspaper's online readers were more, not less, likely to read its print edition. These patterns are indicative of the appeal of the print edition among the general public, Web users, and users of the online edition, despite these newspapers' online offerings being free.

Table 4.1.
*Print Penetration Among All, Web Users,
and Readers of the Online Edition*

Newspaper	Print penetration (%)		
	Among general public	Among Web users	Among users of its online edition
<i>Austin American-Statesman</i>	74	74	83*
<i>Oriental Daily</i>	48	48	70***
<i>Apple Daily</i>	40	47*	63***
<i>Ming Pao</i>	18	24**	56***
<i>Sun</i>	15	14	52***

* $p < .05$, ** $p < .01$, *** $p < .001$

In 2009, another study (Chyi & Huang, 2011) examined how one newspaper's online and print readerships relate to each other, also adopting the measure from the Austin and Hong Kong studies. Based on data collected from a large-scale panel-based online survey of more than 7,000 Web users in a larger media market, Taiwan, this study revisits the aforementioned patterns regarding the relationship between online and print readerships by formulating and testing three hypotheses.

H1: Within the local market, a newspaper's print penetration is higher than its online penetration, or

$$\frac{\text{Total Online Edition Readers}}{WU} < \frac{\text{Total Print Edition Readers}}{WU}$$

where WU = the number of Web users

This hypothesis holds true across all four major newspapers under study.

H2: Within the local market, the majority of the leading newspaper's online readers are also readers of its print edition, or

$$\frac{\text{Hybrid Readers}}{\text{Total Online Edition Readers}} > 50\%$$

Where hybrid readers = online edition readers who also read the print edition

This hypothesis also holds true, not only for the No. 1 newspaper but also for the No. 2 paper circulated in the Taiwan market.

H3: Within the local market, readers of the online edition are more likely to read the same newspaper's print edition, or

$$\frac{\text{Total Print Edition Readers}}{WU} < \frac{\text{Hybrid Readers}}{\text{Total Online Edition Readers}}$$

This hypothesis is also supported.

Therefore, with empirical evidence found in not just one or two but three distinct newspaper markets, Chyi and Huang (2011) combined the hypotheses and theorized these seemingly universal patterns:

$$\frac{\text{Total Online Edition Readers}}{GP \text{ or } WU} < \frac{\text{Total Print Edition Readers}}{GP \text{ or } WU} < \frac{\text{Hybrid Readers}}{\text{Total Online Edition Readers}}$$

where GP = the number of general public

These relationships suggest that, despite extensive content-sharing between one newspaper's online and print products, more local users

opt for the print edition over the online edition. In addition, most of those who are already using the Web edition are still hanging onto the same newspaper’s print edition.

More recent evidence came from a study analyzing data from a 2009 random-sample national telephone survey of 1,001 U.S. adults (Hargrove, Miller, & Stempel, 2011). Table 4.2 translates the results using the terminology of this chapter’s multiplatform audience typology.

Table 4.2.
Percentage of Readers Who Regularly Read Metropolitan and Community Print and Online Newspapers

	%	
	Metropolitan	Community
Online-Only	9	8
Hybrid	6	4
Print-Only	30	32
Neither	56	56
N	(328)	(181)

Source: Hargrove, Miller, and Stempel (2011)

To test the pattern theorized by Chyi and Huang (2011), simply plug the numbers from Table 4.2 into this formula:

$$\frac{\text{Total Online Edition Readers}}{GP} < \frac{\text{Total Print Edition Readers}}{GP} < \frac{\text{Hybrid Readers}}{\text{Total Online Edition Readers}}$$

In the case of metropolitan papers, total online edition readers (hybrid plus online-only) make up 15% of the general public. Total print edition readers (hybrid and print-only users) make up 36%. And the portion of hybrid readers among total online edition readers is $6/15 = 40\%$. So the readership patterns first identified in the 1998 Austin study (which was

conducted in the Stone Age of online news) still hold true among the general U.S. population in 2009.

Comparing now and then, the only major difference is the significantly reduced penetration of the print edition, which, as discussed in Chapter 2, is an inevitable consequence of 1) information surplus (and therefore shouldn't surprise anyone), 2) all the cost-saving measures U.S. newspapers have been taking since the recession, which have affected the print edition the most, and 3) the continuing diffusion of high-speed Internet and mobile devices. So the dwindling of print readership should not be surprising. Yet still 40% of local online newspaper readers read the same paper's print edition, which is not only noteworthy but also revealing, especially if one considers the fact that, in 2009, the vast majority of newspapers were still giving online news away for free, while print readers had to pay for the "dead-tree" edition, and usually at a higher price than in, say, 1998.

So, for those who believe the print newspaper is dying and are eager to jump onto the digital bandwagon, all the empirical evidence suggests the opposite. The truth is that the print format has remained competitive *in relation to* the same newspaper's online counterpart. Not only does the audience respond to the print edition more favorably, advertisers vote for the print edition with their ad dollars. As of 2012, U.S. newspapers' print editions generated \$18.9 billion of advertising revenue; the online editions produced \$3.4 billion only—the dead-tree edition still accounting for as much as 85% of total ad dollars despite dramatic declines since the recession (Edmonds et al., 2013). It is crystal clear that the print edition has remained the core product, the cash cow, the golden goose, in a newspaper's product portfolio. Unfortunately, the print edition's stronger-than-expected performance is too often ignored by newspaper executives.

4.4. "Digital Natives" and the "Dead-Tree Edition"

One of the reasons for underemphasizing the obviously superior performance of the print product is that newspaper managers (and many others) believe they should be eyeing the future, as suggested

by Christensen, among others. The mainstream narrative goes like: The future is online because *digital natives* are online and they would never read your old, print newspaper. Therefore, as one publisher puts it, “Newspapers need to figure out how to attract young people to their Internet sites” (quoted in Graybeal, 2011, p. 95).

The term “digital natives” was coined by Marc Prensky in 2001 and has been used frequently to refer to people who were born after the introduction of digital technology (Palfrey & Gasser, 2008; Prensky, 2001). The idea (actually a myth) is that digital natives, who grow up with the technology, understand it better and thus have different (or more advanced) media habits. News organizations are thus encouraged to follow the lead of tomorrow’s news audience because “the digital natives are leading the way—and are way ahead of news organizations” (Yaros, 2008, para. 3). Along this line of thinking, newspaper people developed their digital strategy based on this two-part belief: 1) Only the elderly will continue buying the dead-tree edition; 2) The best way to reach young readers is through digital channels.

Part 1 of the mantra is seemingly true, because age is indeed often positively associated with newspaper use. For example, 46% of those over age 65 report reading a print newspaper yesterday, and only 7% of those ages 18-24 do (Pew Research Center for the People & the Press, 2010). But age differences in newspaper consumption have existed long before the Internet became a mass medium (Edmonds et al., 2013; Mindich, 2005). Research showed that young people prefer entertainment over news and political information (Prior, 2007) and are less likely to find news relevant or interesting than older adults (A. M. Lee & Chyi, 2014). When asked to evaluate mainstream news media’s coverage of their generation, more than half of millennials—those born between the early 1980s and late 1990s—gave news organizations a letter of C or below for failing to give them compelling reasons to follow the news (Poindexter, 2012). While age has almost always been considered one major predictor of news consumption, research shows that “news noteworthiness” has a stronger influence on news consumption in terms of news enjoyment, newspaper and TV news

use, and paying intent for print newspapers (A. M. Lee & Chyi, 2014). In other words, to retain young readers by focusing on distribution platforms might be missing the point.

Taking into account the plausible influence of age on newspapers' online and print penetrations, Chyi and Huang (2011) tested the aforementioned hypotheses among different age groups (19 and under, 20-29, 30-39, and 40 or over). All the relationships still hold true: Even among the youngest age group, the four newspapers' print penetration was higher than its online penetration; most of their online readers in this age group also read the print edition; compared with Web users, their online readers in this age group were more likely to read the print edition.

Hargrove, Miller, and Stempel (2011) also examined the influence of age on the use of metro and community newspapers' online and print editions. As expected, older respondents are more likely than younger ones to read the print edition of the metropolitan newspaper regularly. But across all age groups (18-34, 35-54, and 55 and over), the metro paper's print penetration is much higher than its online penetration—for example, 11% of those age 18-34 read the online edition, while 30% read the print edition regularly. In the case of community newspapers, no substantial difference exists: 24% looked at the online edition, and 22% read the print edition regularly. No sign of digital salvation at all.

If delivering news through the Web is no longer trendy, how about smartphones and tablets, where digital natives are? Table 4.3 presents the results of a 2012 Pew report on news consumption through mobile devices (Pew Research Center's Project for Excellence in Journalism, 2012). The 18- to 29-year-olds were no more likely than those 65 or older to use a tablet to get news daily. In addition, they were not any more likely to check news on a smartphone than 30- and 40-somethings. In other words, even though younger people are more likely to own and use mobile devices, they are not more likely to use them for news purposes. And when age seems to influence the use of apps on smartphones, the pattern is somewhat surprising: 35% of news users 50 and older reporting getting news through apps, but only 26% of those under 50 did so (Pew

Research Center's Project for Excellence in Journalism, 2012). And most news app users (58%) prefer a traditional, print-like experience (versus 41% higher-tech features such as interactive, audio, and video content), and that preference toward print holds up across all age groups (Pew Research Center's Project for Excellence in Journalism, 2012, p. 4).

Table 4.3.
Percent of Owners Who Get News on Each Device Daily

Age	%	
	Tablet	Smartphone
18-29 years	33	37
30-49 years	38	40
50-64 years	43	31
65+	32	25
<i>N</i>	(2013)	(3947)

Source: Pew Research Center's Project for Excellence in Journalism (2012)

More evidence against conceptualizing digital natives like “a separate species, forged in the primordial stew of Internet, whose habits are ... alien to the rest of the country” (Thompson, 2012, para. 1) exists. One study examined digital natives' preference for the print and digital formats of their campus newspaper (Chyi, 2013). The rationales of studying college newspapers include: 1) the vast majority of college newspapers publish in both online and print formats, 2) both formats are offered for free, 3) target readers are college students ages 18-22, all with Internet access, and 4) college newspapers cover campus life, which ensures content relevance (or news noteworthiness). Therefore, if digital natives are prone to news in digital formats, they should have dropped the print edition of their campus newspaper by 2011. However, results collected through a national survey of nearly 200 U.S. college newspaper advisers indicated that the print edition reached nearly twice as many readers as the Web edition on a given day. Approximately 93% of college newspaper advisers reported that their students preferred the print edition;

only 7% said college students preferred the Web edition—the most cited reason being accessibility and portability. Students' preference for the physical format was also reflected in print circulation and advertising revenue. Between 2008 and 2011, print circulations remained stable for 58% of the newspapers surveyed, 26% reported circulation declines, and 11% reported increases. And the print edition generated almost all the advertising revenue (96%) for college newspapers.

In conclusion, digital natives are not dropping the print product in favor of its online counterpart as newspaper managers think they are. Any strategy, if based on unchecked assumptions, runs the risk of misunderstanding the audience and oversimplifying the reality. Moving from print to online may actually turn young (and old) readers away, as suggested by the case of *Taloussanommat*, the Finnish financial daily, which dropped its print edition and went online-only in December 2007 but did not see a substantial increase in online traffic, as its revenue dropped 75% (Thurman & Myllylahti, 2009). When it comes to declines in newspaper demand, the real problem, be it a lack of interest (Kaufhold, 2010; A. M. Lee & Chyi, 2014), an inevitable consequence of information surplus, or unsatisfactory digital product offerings, “has little to do with the ‘print format’ per se and cannot be solved with technology alone” (Chyi, 2013, p. 14).

5. Perceived Inferiority of the Online Edition

The previous chapter synthesizes research findings on users' favorable response to newspapers' print product in relation to the digital edition. It is clear that the print edition remains the cash cow, which has low (or no) growth but high market shares and is funding "problem child" ventures (Picard, 2003, 2005). The question is: After everything newspapers have done and undone—investing in online and cutting back on print—why do readers still stick with the dead-tree edition? How come the digital edition hasn't gained much ground?

5.1. The Performance Gap: An Inconvenient Truth?

Before we try to answer these questions, we should address why the industry did not appear to have paid attention to the performance gap between the print and digital editions. Despite so much empirical evidence, few take the performance gap seriously. Newspaper companies' primary strategy is to devote more resources to digital and to cut back on print. Perhaps most believe "it is a matter of time"—give it enough time, and the digital future would emerge—and by then, "[w]hat this world will look like is anyone's guess, but it probably won't include *The Washington Post* thudding on anyone's doorstep at 5 in the morning" (Penenberg, 2004, para. 14). Overall, very few challenged the vision of an all-digital future.

And indeed, online news use, like all things digital, has been growing—as the disruption theory predicted. In 1995, roughly 2% of American adults reported getting news online three days a week or more. By 2010, about half (46%) did so. That was also the year remembered as when "Web tops newspapers as news source for first time" (Olivarez-Giles,

2011), or “Online news readership overtakes newspapers” (Choney, 2011), because the State of the News Media report announced that “[f]or the first time ... more people said they got news from the web than newspapers” (Rosenstiel & Mitchell, 2011, para. 11). Such statements are often interpreted by newspaper managers as a sign of encouragement for their digital endeavors. But in fact, the growing number of online users may well be “a misfortune in disguise,” giving false hope that the digital future is coming. Given the rapid adoption of digital devices among the general public, and online news offerings being free in most cases, growth in overall online news access is predictable, and it offers nothing for newspaper managers to be excited about, especially because aggregators have become the dominant news destinations online (see Chapter 2). However, newspaper companies, instead of evaluating their product portfolio as a whole, were determined to stick to their digital dream and have been diligently serving content on every emerging platform. Unfortunately, no matter how hard they try, up till this day, still no evidence suggests their online ventures will reach economic viability any time soon. As stated earlier, newspapers’ digital products generated only 15% of total advertising revenue in 2012 (Edmonds et al., 2013), and, for every \$16 in print advertising revenue lost, only \$1 in digital ad dollars was gained (State of the Media, 2013). The digital paywall has not changed the overall picture either, and probably never will (Chyi, 2012; Myllylahti, 2013).

In recent months, more data documenting the stronger-than-expected appeal of print newspapers were released, and some senior media observers described such findings as “surprising” (Doctor, 2013; Edmonds, 2013), indicating how novel this observation appears to the industry. But the performance gap between newspapers’ print and online products has existed for a long time and has been studied substantially by academics. As for why such a gap has largely remained a research topic as opposed to an industry concern, one can only suspect that newspapers find the truth embarrassing and hard to swallow given all the investment in their digital ventures over the years, which was driven by firm beliefs in an all-digital future. The most recent example is how one newspaper company de-emphasized the superior performance of its

print product as if it were a shame when announcing first-quarter 2014 results: “Print and digital advertising revenues increased 3.7 percent and 2.2 percent, respectively. Digital advertising revenues were \$37.8 million compared with \$37.0 million in the 2013 first quarter” (The New York Times Company, 2014a).

In sum, the inconvenient truth, the performance gap, or the “surprisingly persistent appeal of newsprint” (Doctor, 2013) carries profound managerial implications and should have led to a revised business strategy.

As for the supposedly never-ending growth in online news use, it should be noted that the percentage of people accessing news online has remained unchanged since 2010, suggesting that it may have hit a plateau. But the industry has quickly shifted its attention to the growth of mobile news access, as emphasized in the recent Pew report (Pew Research Center for the People and the Press, 2012).

5.2. Online Edition: The Problem Child

After nearly 20 years of experimentation, it is clear that most U.S. newspapers’ digital product has failed to deliver on its promises. Specifically, the Web edition is outperformed by its print counterpart in terms of usage, preference, and paying intent.

Usage: Low Penetration, Low Engagement

In the very early years, the industry actually had some concerns about the cannibalization effect—fearing that free online offerings may erode the print reader base because the online edition offers similar content. After some initial experiments, the effect seemed negligible in most cases (Chyi & Sylvie, 2000; Online Publishers Association, 2004). Thus the vast majority of U.S. newspapers took the “eyeball first” approach, giving most or all of their content away online for free until very recently.

In retrospect, the major reason cannibalization was not noticeable was that most online users did not drop the print edition, indicating the lack of appeal of the digital product, even among online readers (see Chapter 4 for details).

As a result, a newspaper's online penetration is almost always lower than its print penetration within the local market, as Chapter 4 has illustrated. But how low exactly is it? A 2008 survey conducted in 100 local newspaper markets indicated that over 60% of respondents had never visited their local newspaper's Web site, and only 14% accessed the site within the past week (Readership Institute, 2008). The most recent NAA data collected by Scarborough research in the top 150 markets suggest that 55% of newspaper readers are print-only, 15% use both print and Web, and only 7% are Web-only (Edmonds, 2014). Moreover, even when readers pay for the all-access bundled package that includes print, Web, smartphone, tablet, and e-edition, most don't use the digital products much, if at all (Doctor, 2013).

Adding insult to injury, when users do visit a newspaper site, they generally spend no more than 5 minutes on the site—the most recent data indicated that a visit lasted for an average of 4.4 minutes, which translates into 39 minutes per user throughout the month of November 2012, or 78 seconds per day (Newspaper Association of America, 2012c).

Combining penetration and engagement, the online–print performance gap is deep and wide, making reported statistics seem unrealistic. For example, many were shocked when Langeveld in 2009 and 2010 estimated that about 97% of time spent with newspaper content was in print, and only 3% was online (Langeveld, 2009, 2010). Academic research reported similar findings. Based on 2011 data provided by 12 U.K. newspapers, Thurman figured that at least 96.7% of the time spent with these newspapers by their domestic readers was in print (Thurman, 2014). Without fully disclosing its methodology, McKinsey and Company also reported that 92% of the time spent on news consumption was on legacy platforms—41% on TV, 35% on newspapers and magazines, 16%

on radio and other audio, 4% on computers, and 2% on smartphones and tablets each (Edmonds, 2013).

Preference: Negative Perception

While “media use” has been the major indicator of popularity in communication research, preference also influences news consumption, especially in a high-choice media environment (Chyi & Lee, 2013; Chyi & Yang, 2012). The digital newspaper does not score highly in terms of preference at all. A series of studies have shown that the online edition is not perceived as equally desirable by users when compared with the print product.

An early study conducted in 1995 reported that users found a news Web site “unappealing to browse leisurely ... uncomfortable to travel through, not preferable over traditional newspaper, and more difficult to read than a traditional newspaper” (Mueller & Kamerer, 1995, p. 11). Later, an experiment exploring how potential readers perceived portable document viewers (PDVs), the Web, and print newspapers found the Web format the least preferable (Schierhorn, Wearden, Schierhorn, Tabar, & Andrews, 1999). These were of course early findings, but as time went by, users’ attitude toward the online edition hasn’t appeared to improve much.

A 2002 survey of Hong Kong residents measured general liking of online news, newspapers, TV news, and radio news; online news turned out to be the least likeable news format (Chyi & Chang, 2009). A survey of Dutch newspaper readers compared the usefulness of online newspapers with that of print newspapers and other media in specific content areas—politics, finance, sports, theater/film/literature, crime, local news, and celebrities—and respondents found the print newspaper more useful than online newspapers across all these domains (De Waal, Schoenbach, & Lauf, 2005). In 2004, the Online Publishers Association conducted a survey of 25,852 visitors on 41 major news sites (including NYTimes.com, WSJ.com, and USA Today.com). Respondents found online media to be less satisfying, less likeable, and less enjoyable than offline media

2-to-1. Specifically, 31% of respondents who used both online and offline media said they found the offline media more satisfying, while only 16% said so about online media. Similarly, 31% found offline media more likeable, while 15% said so about online media. In terms of enjoyment, 37% found offline media more enjoyable; only 14% said so about online media (Online Publishers Association, 2004). In the 2008 Readership Institute survey, respondents rated *Gives me something to talk about*, *Looks out for my interests*, *Ad usefulness*, and *Touches and inspires me* higher for the print edition of their local newspaper than the Web edition (Readership Institute, 2008). In a 2010 survey of U.S. Internet users, 58% of the respondents viewed the print edition as their favorite newspaper format; only 22% found the Web edition most favorable (Chyi, 2012). Using different measures, these studies have consistently documented the negative attitude toward online news.

Paying Intent: Or the Lack Thereof

The “paywall” terminology is new, but the idea dates back to the 1990s, when newspapers were worrying about the cannibalization effect. Some experimented with online subscription plans, but most had problems charging anything for online news access. A consumer survey conducted in 2002 reported that 70% of Internet users could not understand why anyone would pay for online content (Jupiter Media Metrix, 2003). Around that time, the subscription rate for fee-based online newspapers was 0.2% to 2.6% of print circulation (Borrell & Associates, 2001). A 2010 survey documented Internet users’ unenthusiastic response to newspaper content in Web and app formats, regardless of payment models—be it micropayment, metered system, day pass, “build your own, mix and match,” free/discounted tablet with contract, or all-access bundled packages. The same study found that fully 60% of online users were willing to pay zero dollars for their favorite newspaper in Web format (Chyi, 2012). As of 2013, even with 430 newspapers adopting some kind of paywall models (News&Tech, 2013), the contrast between online subscription and print circulation remains sharp. Gannett, which owns 81 local dailies in the United States, retained merely 65,000 digital-

only subscribers as of June 2013. The number of online-only subscribers was 2.2% of its aggregate weekday circulation of 3 million subscribers (Mutter, 2013).

Not paying for online news because free alternatives are readily available is understandable, but the fact that 44 million Americans are still willing to pay for the print edition (which carries similar content) indicates that the “container” is not neutral (Thurman & Myllylahti, 2009). Media format has an enormous impact on consumer choices.

5.3. Online News: An Inferior Good

Empirical research has unmistakably identified the problem child. But why is the online edition not as engaging, less likable, less satisfying, less enjoyable, and less useful, and not worth paying for, when compared with the print edition? Considering the fact that so many U.S. newspapers have been striving to offer interactivity, convenience, immediacy, and multimedia content online, users’ lukewarm response to the online edition is difficult to interpret.

An Exploratory Focus Group Study

Intrigued by the performance gap between online and print products in terms of use, preference, and paying intent, Chyi (2002) conducted a focus group study to explore how users respond to online and print news differently, which serves as the first step of a systematic inquiry into the economic nature of online news that consists of several empirical studies.

The researcher recruited a special group of participants: exchange students (mostly from the U.S.) enrolled in a public university in Hong Kong. All 12 participants used the Internet as an information source in their home country and in Hong Kong. Comparing their online experiences in two different media environments shed light on the nature of online news in both local and long-distance contexts.

The focus group discussion centered on usage patterns, format perception, and paying intent for online vs. traditional news. In terms of usage, of particular interest was online users' news-seeking behavior—when, how, and why they used online versus offline media, in Hong Kong and in their home country. In terms of perception, how did they perceive content presented online versus offline? As for paying intent, how likely did they think they were to pay for online content?

Regarding online news use, all the participants were heavy users seeking news from their home countries while studying in Hong Kong. Almost all said they relied on the Internet more as a news source in Hong Kong, and several participants said the news websites served as a replacement for their offline counterparts not available in Hong Kong. Overall, the participants acknowledged increased online news usage after moving to Hong Kong, suggesting that online news was not as important a news source when offline choices were abundant.

To identify the most salient factors that influence users' perception of online and print newspapers, participants were asked to describe their consumption of print and online newspapers with an analogy. They were asked to write down their answers on the questionnaire before explaining to the group. The open-ended question elicited the following responses:

A print newspaper is like walking; an online newspaper is like driving a car.

A print newspaper is like a turtle; an online newspaper is like a hare. The turtle (print) wins the race cause it's good; the hare is fast but doesn't win cause the online edition is not very good.

*A print newspaper is like Times Square (an upscale shopping center in Hong Kong); an online newspaper is like the Lady's Street (a crowded street market in Hong Kong with merchants selling inexpensive items on the sidewalk). *In Times Square, you can find things with better quality, and if you want to get back to something you know where it is. On the**

Lady's Street, you can only get cheap stuff, and you can't find what you want cause it's chaotic.

A print newspaper is like a short novel; an online newspaper is like a one-page cover.

A print newspaper is like a classic book (by Dickens, Fitzgerald, etc.); an online newspaper is like a popular book (by J.K. Rowling, Stephen King, etc.)

A print newspaper is like a home-cooked, balanced meal (healthier); an online newspaper is like junk food or fast food (convenient).

A print newspaper is like taking an exam (tangible but you need to flip through all the pages; a mess; headache; black-and-white); an online newspaper is like reading my favorite Harry Potter book (more colorful, headline-browsing, fast-reading).

A print newspaper is like a gourmet sit-in restaurant (takes time, out-dated, higher quality); an online newspaper is like a fast-food restaurant (24 hours a day, fast, not as good but fast food also fills).

Factors that came to the participants' minds when they constructed these analogies include speed, convenience, newness, and, most important, quality. Those who emphasized quality conceptualized the print edition as better and containing more in-depth information. They used "fast food" (vs. a balanced meal), "Lady's Street" (vs. Times Square), "popular books" (vs. classic books), and the "hare" (vs. turtle) to describe their perception of online vs. print newspapers. When reminded by the moderator that many online newspapers actually provide the same or even more information as their print counterparts, one said that he didn't really think about it but just felt the print edition has better quality.

It is therefore unsurprising that, while most participants ranked the Internet their No. 1 information source during their stay in Hong Kong and were able to identify many of its strengths and weaknesses as a news medium, they showed little intent to pay for online content. As

for why they were unlikely to pay even for their favorite news site, some said there are many other options that are free. “Online there are always some other ways to get something that’s free.” “As long as there’s any outlet for news that’s free, I’d go for that bad free outlet rather than pay for the not-as-bad one.” Some said online news “should” be free or cheaper than the print newspaper “because they don’t need to print the paper.”

Some would rather choose other media over a fee-based news website. Two said they would pay for newspapers but not for online news because of the Web’s transient nature. One said, “I like something tangible.” The other said, “Paying for the Web, you run the risk of paying for something you may not use at all. But the paper is there. At least I can burn it.”

Follow-up questions asked the participants whether websites could offer any specific feature to increase their paying intent. Suggestions include extra information available only in the online edition and news archives, but most could not think of any specific feature they would be willing to pay for.

Since the participants’ paying intent was surprisingly weak, another follow-up question asked: “Now imagine a website as the only information source from which you can get news from your home country, would you pay for it?” Seven participants still said they would not pay, and five said they would. The researcher concluded that while many news media offer news either for free or at a relatively low price, online news services would easily be perceived as overpriced in users’ minds once any subscription scheme is adopted (Chyi, 2002).

Overall, these focus group participants unmistakably indicated that they use online news, don’t like it, and wouldn’t pay for it. In retrospect, it is hard to imagine that an exploratory study conducted in 2002 would identify most of the major problems facing online newspapers. It is even harder to believe that those problems have pretty much remained unsolved up till today.

Hypothesis Testing with Pew Data

The focus group finding that online news is perceived by users as of lesser quality seemed to provide an explanation for the bewildering performance gap between a newspaper's online and print editions identified by various survey studies (see Chapter 4). Therefore, Chyi (2002, 2005a) hypothesized that online news is an "inferior good."

In microeconomics, the theory of goods distinguishes inferior goods from normal goods. When income increases, the demand for an inferior good decreases; when income decreases, the demand for an inferior good increases, other things being equal. Typical inferior good examples include ramen noodles, rice, potatoes, and bus travel—things people consume more when income decreases. In contrast, the demand for a normal good is positively associated with income, other things being equal. Whether a good is an inferior or normal good is determined by the income elasticity of demand, i.e., the percentage change in quantity demanded divided by the percentage change in income, everything else held constant (Hoskins et al., 2004, p. 46):

$$\varepsilon_1 = \frac{(\% \text{ change in quantity})}{(\% \text{ change in income})} = \frac{\frac{\Delta Q}{Q}}{\frac{\Delta Y}{Y}}$$

When the income elasticity of demand for a good is negative, the good is an inferior good. When the income elasticity of demand for a good is positive, the good is a normal good.

Using the 2004 Biennial Media Survey data collected by the Pew Research Center, Chyi and Yang (2009) empirically tested the "online news is an inferior good" hypothesis. They proposed two versions of the hypothesis that when income increases, online news use

decreases. H1 controlled for demographics (gender, age, education) and news interest; H2 controlled for demographics (gender, age, education), news interest, and other news media use (newspaper, TV news, radio news). Online news use was measured by asking respondents to estimate the amount of time they spent reading news online yesterday. About 23.7 percent of the respondents said they read news online yesterday. These online news users were included in the ordinal logistic regression analyses.

Results indicated a negative relationship between income and online news use on the other-things-being-equal basis as hypothesized. In other words, online news is an inferior good among users. Chyi and Yang also identified a positive relationship between income and print newspaper use, suggesting that online news and print newspapers coexist not as two normal goods but as a combination of an inferior and a normal good. Such findings helped explain the performance gap between online and print editions: News, when presented online, becomes an inferior good, perceived as less favorable in relation to news in print.

Hypothesis Revisited with Pew Data

In a subsequent study, Chyi and Yang (2012) re-examined the “online news is an inferior good” hypothesis using the Pew Research Center’s 2008 Biennial Media Consumption Survey data. Since 2006, the Pew Center has reclassified newspaper website use as part of newspaper use. Therefore, online news use in this and later datasets no longer includes newspaper website use. Overall, 26 percent of the respondents said they got news online through the Internet (excluding newspaper sites) yesterday. These online news users were then asked, “Aside from newspaper web sites, about how much time did you spend reading news online yesterday?” Like the original study (Chyi & Yang, 2009), only online news users (yesterday) were included in the partial correlation analyses.

Results indicated a negative relationship between income and online news use, controlling for gender, age, education, and news interest, as hypothesized. Therefore, the “online news is an inferior good” hypothesis was once again supported, as was the hypothesis that the print newspaper is a normal good. (It is noted that the survey did not specify whether “reading a daily newspaper” included reading the online edition or not. But common sense suggests that most respondents would interpret “reading a daily newspaper” as “reading a daily newspaper in print,” although this is not the intention of the Pew Research Center, as the next question distinguishes the print edition from the online edition. The researchers considered this a flaw in Pew’s questionnaire design.) Still, this study reconfirmed that online news is an inferior good. And the print newspaper, on the other hand, is a normal good.

Online Edition Perceived as Inferior: Side-by-Side Comparisons

In economic terms, whether a product is an inferior good is determined by a negative relationship between income and demand on the other-thing-being-equal basis (Hoskins et al., 2004, p. 46). Yet, for such a relationship to hold true, better-yet-more-expensive alternatives must exist. For example, as income increases, bus travel decreases—because people choose more attractive alternatives (e.g., air travel or driving) that have become more affordable. Therefore, inferior goods always coexist with more costly alternatives that are considered “better.” In other words, *inferior goods* (in economic terms) are perceived as *inferior* (in plain English) when compared side-by-side with such alternatives.

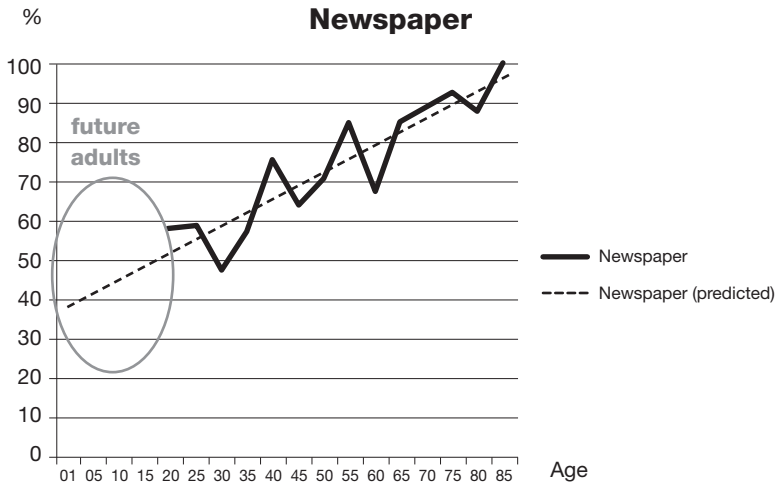
To make such side-by-side comparisons, a series of surveys examined users’ preference for a newspaper’s print or online edition on the other-things-being-equal basis. Respondents were asked this question: “*Imagine that you are provided with both print newspapers and online newspapers with the same news content and at the same price. Which would you prefer?*” The purpose of the hypothetical “same content

and same price” scenario built into this question is to control for the plausible effect of content and price on format preference in order to measure users’ net preference for either format. In 1997, 76% of Web users in Austin, Texas, said they would prefer the print format over the online format (Chyi & Lasorsa, 1999). A follow-up 1998 survey reported that 72% of Web users preferred the print format (Chyi & Lasorsa, 2002). In 2002, 83% of online news users in Hong Kong said they would prefer the print edition (Chyi & Chang, 2009). In 2010, a national survey of U.S. Internet users indicated that 70% of Web users would still prefer the print edition to the Web edition given the same content and at the same price (Chyi & Lee, 2012). Taken together, these studies have demonstrated that a newspaper’s online edition is perceived as inferior when compared with its print counterpart on the other-things-being-equal basis.

Preference for the Print Format among Future Adults

Chyi and Lee (2012) conducted further analysis to identify predictors of preference for newspaper formats. Among age, gender, education, income, and ethnicity, age was found to be the only factor influencing format preference for newspapers. Among those 55 years or older, 82% said they would prefer the print edition. Among those 35-54, 72% said so. Even among the youngest respondents (ages 18-34), 55% indicated preference for the print edition. Based on such data, Chyi and Lee visualized the relationship between age and format preference for the print edition and built a multiple regression model. The trend line in Figure 5.1 illustrates the relationship between age and format preference. It also helps predict format preference among “future adults” (i.e., those who were under 18 at the time of the study, 2010) through extrapolation. While age, as expected, is positively related to preference for the print format, the intercept on the Y-axis in Figure 5.1 suggests that, even among the newborns at the time of that study, 37% would prefer newspapers in print format. In other words, contrary to what the “death narrative” suggests, online users’ preference for the print newspaper format would remain strong for many years to come (Chyi & Lee, 2012).

Figure 5.1.
Predicting Preference for Newspapers in Print Format



5.4. Why is Online News Inferior?

So, online news, like ramen noodles, potatoes, or macaroni and cheese, is an inferior good. This proposition provides a plausible explanation for the performance gap between a newspaper’s online and print products, which would be very difficult to interpret otherwise. However, notwithstanding support from empirical data, many have found the “Ramen Noodles Theory” hard to swallow. For example, one anonymous reviewer commented, “Such interpretations are at best ambiguous, doubtful, debatable, uncertain, questionable, imprecise, and vague.” After all, no news product has ever been labeled as an inferior good before. And most practitioners and scholars have high expectations for the Internet as a news platform, which offers an array of interactive features and multimedia content—most of which are unattainable by print and other legacy media. So, why on earth would anyone in their right mind perceive it as inferior?

Well, if one compares online news use with fast food consumption, the similarities become self-evident. First, as indicated earlier in this chapter, visitors to newspaper sites do not stay around for long—4.4 minutes per visit (Newspaper Association of America, 2012c). Among news users who prefer the online edition, the vast majority indicated “convenience” when elaborating on their format preference (Chyi & Chang, 2009). Similarly, when a Pew survey asked regular Internet news users what sets the Internet apart as a news medium, the top-ranked response was “accessibility and convenience” (Pew Internet & American Life Project, 2006). These findings suggest that the value, or competitive advantage, of online news lies in its convenience more than anything else. Most users perceive online news as convenient, just as fast food and ramen noodles are perceived as such, compared with a balanced meal in a fine restaurant. This may also explain why news aggregators, as opposed to major newspaper sites known for quality news, dominate the list of most-frequented news sites—they aggregate news content and make it readily accessible when users multitask (e.g., check e-mail). It is therefore unsurprising that users take advantage of such content but perceive it as inferior, which, in turn, results in the performance gap between online and print newspapers in terms of use and paying intent (Chyi & Lee, 2013).

Regarding why online news is so poorly received, three types of explanations exist: physical, psychological, and biological.

Physical Explanations: The Less-Than-Satisfactory Online Reading Experience

The computer-based reading experience is rarely pleasant. Until recently, most computer screens were characterized by relatively low resolutions (in terms of dpi), while print media with higher resolutions generate finer, sharper text and images. In addition, staring at the computer screen causes eye strain. Research shows that between 50% and 90% of working adults suffer from computer vision syndrome (WebMD, n.d.), so longtime reading online is neither comfortable nor to be encouraged. According

to usability expert Jakob Nielsen, most people don't read Web pages word-by-word, so content should be reformatted into scannable text to increase usability for online reading (Nielsen, 1997). But most newspaper sites are not known for usability. "Shovelware"—moving print articles online without further processing the information—cluttered design (Rabaino, 2010) and the ever-increasing level of annoyance brought about by intrusive ads plague many newspaper sites.

In recent years, the computer has been classified as a "lean-forward" medium, as opposed to "lean-back" ones such as print newspapers, television (Nielsen, 2008), and tablets (Rue, 2010; Will, 2012). Although the distinction between these two engagement styles and its implication remain vague, the lean-back mode is considered more relaxing and the lean-forward mode not as enjoyable. In 2010, Nielsen conducted an experiment testing reading speeds and user satisfaction on various platforms (print, computer, Kindle, and iPad). Results showed that reading a printed book offered the greatest speed, and subjects felt least comfortable with reading on the PC because it reminded them of work (Nielsen, 2010). A 2010 survey of more than 700 U.S. Internet users also reported that digital reading devices (computers, e-readers, smartphones, and iPad) did not deliver a more enjoyable news experience than traditional media (Chyi & Chadha, 2012). In sum, the less-than-satisfactory online reading experience may help explain why users perceive digital content as inferior.

Psychological Explanations: Online News is Free

In addition to the physical constraints of the computer screen that short-circuit the enjoyment of online news, another factor that may have contributed to the perceived inferiority of online news is purely psychological: People perceive the online edition as inferior because it is offered for free. This may sound like an obscure explanation, but behavioral economists have confirmed that the price of a product has a tremendous impact on perceived product quality. In a controlled experiment, subjects were asked to taste wines that they believed to be

different and sold at different prices, while in reality the wines were identical. Results showed that increasing the price of a wine increases reported ratings of flavor as well as brain activity in an area related to experienced pleasantness. Such findings challenge the assumption that the experienced pleasantness from consuming a product depends solely on the product's intrinsic properties and the state of the consumer. In other words, non-intrinsic factors such as price easily sway consumer perception (Plassmann, O'Doherty, Shiv, & Rangel, 2008). Similarly, research showed that lower buffet prices lead to less taste satisfaction. Diners who paid \$8 for the buffet rated the pizza as being 11% tastier than those who paid \$4. The researchers suggest buffet owners think twice before setting a low buffet cost, because consumers will rate the food lower in quality but will eat just as much (Just, Sigirci, & Wansink, 2014). If these findings sound counterintuitive, another study revealed that simply changing the price of an energy drink may even influence human subjects' ability to solve puzzles (Shiv, Carmon, & Ariely, 2005).

Therefore, users may consider online news inferior because, in most cases, it has been offered for free.

Biological Explanations: The Power of Tangible Materials

Neuromarketing is a new trend in marketing research, which measures consumers' response to marketing materials by monitoring their brain activity. In an applied study, researchers used functional magnetic resonance imagery (fMRI) brain scans to examine the effectiveness of direct mail and digital ads. Results showed that human brains process paper-based and online marketing stimuli in fundamentally different ways. Tangible materials (paper ads) leave a deeper footprint in the brain (more real), generate more brain responses associated with internal feelings (greater internalization), and trigger more emotional processing, which is important for memory and brand associations (Millward Brown, 2009).

Such results are in line with what we already know about the cognitive processing of news. One study after another has revealed that news in print generates better recall than news in digital format (Adam, Quinn, & Edmonds, 2007; Eveland Jr, Seo, & Marton, 2002; Santana, Livingstone, & Cho, 2013; Tewksbury & Althaus, 2000), suggesting that people respond more favorably to tangible materials. Even TV news fares better than online news in terms of recall (Conway & Patterson, 2008; Eveland Jr et al., 2002).

An intriguing experiment showed that physical touch experiences influence social judgments. In that study, subjects were asked to evaluate a job candidate by studying a résumé placed on either light or heavy clipboards. And heavy clipboards make job candidates appear more important (Ackerman, Nocera, & Bargh, 2010). A market researcher thus wonders whether viewing a heavy document in print vs. reading the same “weightless” text on a screen would also make a difference (Dooley, 2011). There is still a lot to learn about the power of tangibility, but human brains seem to favor tangible media over digital media.

Regardless of why users perceive online news as inferior, be it the less-than-satisfactory online reading experience, the fact that online news is free, or the discovery that human brains prefer tangible media, future studies should investigate the multiple factors at play in shaping users’ perception of digital content.

5.5. Managerial Implications

“Goods are what are thought of as goods” (Lancaster, 1966, p. 132). Any product’s economic nature is determined by consumer response. But most U.S. newspapers have been disregarding user preference by disinvesting in, deprioritizing, or killing existing products their readers actually prefer.

To undo the mistake, newspaper executives should first rethink the economic nature of their multiplatform products—that is, acknowledge

that the print product is preferred and the online edition is inferior, as perceived by consumers. As negative as the term “inferior goods” may sound, most inferior goods are useful and convenient, serving as functional alternatives to normal goods. Consider how people consume ramen noodles or fast food—they use inferior goods when they need to, when normal goods are not as readily available or affordable. And many inferior goods are profitable, too.

One thing for sure though: Ramen noodles should not be marketed as steak.

Figure 5.2.

Online News, like Ramen Noodles, is an Inferior Good



Photo by Broderick, used under a Creative Commons license.

6. From the Web to Mobile and Social Media

In their overall failing yet still ongoing digital venture, U.S. newspapers have experimented with many news delivery technologies—the Web, e-readers, mobile, and social media. Despite being a strategic focus, these digital products all suffer from not having a reliable business model. This chapter first reviews newspapers’ Web ventures and then uses the same criteria to evaluate the business prospect of their mobile and social media offerings.

6.1. The Web and its Broken Revenue Models

Two major revenue models underlie U.S. newspapers’ Web experiment: advertising for the most part and subscription (paywalls) in recent years. None seem to be really working, for a multitude of reasons.

Online Advertising

In the 1990s, most newspapers adopted the advertising model, seeking “eyeballs” that would generate ad revenue. A 1999 survey of 64 U.S. online newspaper publishers reported that nearly 80% of the newspaper sites relied on advertising as a revenue source (Chyi & Sylvie, 2001). Since the once-substantial revenue from classified ads evaporated because of competing services, especially Craigslist (Seamans & Zhu, 2013), most newspaper sites rely heavily on display ads. But the effectiveness of display ads has always been questionable. A recent study on “banner blindness” indicated that 60% of people couldn’t recall the last display ad they saw, suggesting advertisers are wasting millions of dollars in online ads (Sullivan, 2013). To address the issue, newspaper sites quickly

made their ads bigger and more intrusive, which, however, may have only contributed to the negative perception of the Web edition. In addition, because of unlimited supply (the more page views, the more inventory), the average cost per thousand impressions (or CPM) for banner ads on newspaper sites is \$6.99, compared with \$60 for print newspaper ads (Apple, 2011). There are also performance-based models, but 77% of online users never or rarely clicked on ads when visiting a news site (Olmstead, Mitchell, & Rosenstiel, 2011), and the average click-through rate of online display ads in general is 0.1%—that is, one click every 1,000 impressions (Chaffey, 2013).

Therefore, when some newspapers erected the paywall in 2011 in a seemingly bold move, the industrywide online advertising revenue was merely \$3.2 billion, which was 13% of total newspaper advertising revenue (\$23.9 billion) (Edmonds et al., 2013), or 10% of total U.S. Internet advertising revenue (\$31.7 billion) (Interactive Advertising Bureau, 2012). The shortage of online ad revenue probably made it easier for newspapers to experiment with paywalls, because there wasn't much to lose anyway.

Paywalls

Newspaper publishers had high hopes for digital subscriptions before the massive adoption of that model starting in 2011 (Jenner & Fleming, 2011), but the idea of paywalls is nothing new. In the very early days of their digital experiment, some newspapers were concerned that offering a free online edition might erode their print subscriber base, although the vast majority opted for the advertising model (Chyi & Sylvie, 2001). *The Wall Street Journal* stood out at this stage (and for many years to come). By the fall of 1998, its interactive edition had secured 150,000 online-only readers who paid a \$49 annual subscription fee (for a detailed account of its model, see Steinbock, 2000).

Soon after the Internet bubble burst in 2000, the second round of debates on the subscription model began. Many publishers argued it was time

to charge for the valuable content they offered online (Outing, 2002) because “there ain’t no such thing as a free lunch.” However, little evidence suggested that users would pay for online news. The sign-up rate for fee-based newspaper sites was as low as 0.2% to 2.6% of the print circulation, and 71% of news site visitors said they would go somewhere else because many free sites were available (Borrell & Associates, 2001). A 2002 survey documented an unenthusiastic response to paid content in Hong Kong—only 2.5% of online news users subscribed to any of the four fee-based online news services available in that market (Chyi, 2005b). On average, newspapers generated less than \$5 in online revenue per unit of circulation (Borrell & Associates, 2003). As a result, the ideas that “content must be free unless it is very specialized” (Carlson, 2003, p. 54) and “it is impossible to charge for general news content” (Herbert & Thurman, 2007, p. 215) became the industry consensus, and media scholars asked whether there is value to maintaining digital media when profitability is not achievable (Kawamoto, 2003).

In September 2005, *The New York Times* launched its paid online service TimesSelect, which attracted 336,000 subscribers by the end of 2006. Among them, about 45% paid \$49.95 a year, and the rest were print subscribers who got access to digital content for free (Project for Excellence in Journalism & Edmonds, 2006). After just two years, *The New York Times* terminated the project, on which Jeff Jarvis (2007) commented, “With it goes any hope of charging for content online. Content is now and forever free.” The vast majority of U.S. newspapers continued giving content away for free online (American Press Institute & ITZBelden, 2009), with notable exceptions of *The Wall Street Journal*, *The Albuquerque Journal* (Friedman, 2003; Windsor, 2009), and *The Arkansas Democrat-Gazette* (Hussman, 2007).

In 2009, known as “worst year for the newspaper business in decades” (Pérez-Peña, 2010), “the [industry’s] dream of getting people to pay” recurred (Kinsley, 2009, para. 2)—this time with a much stronger determination. A survey of newspaper executives showed that nearly 60% of respondents were considering paywalls, although 90% of the responding papers did not charge for content, and only 3% had a

subscription-only site in 2009 (American Press Institute & ITZBelden, 2009). Consumers' willingness to pay, however, remained weak (Chyi, 2012), which was not surprising given the oversupply of information discussed in Chapter 2. Yet the lack of paying intent apparently did not stop newspapers from erecting paywalls around their online content.

Some newspapers came up with novel digital subscription packages. For example, the two Philadelphia newspapers offered discounted Android tablets bundled with a one- or two-year contract for its news apps ("Seize the future: Frequently asked questions," 2011). But most newspapers charge for digital content in Web or app format. In March 2011, *The Dallas Morning News* started charging \$16.95 a month for a digital package that includes Web and apps, known as a "hard paywall" (Doctor, 2011). A few weeks later, *The New York Times* implemented a metered model, or a "soft paywall," requiring online users who view more than 20 articles (reduced to 10 in April 2012) per month to pay \$15, \$20, or \$35 a month (Sulzberger, 2011). Many more newspapers followed suit. Today, more than 450 newspapers are charging for online content (News&Tech, 2014).

The results of these paywall experiments are not always accessible (Myllylahti, 2013). Even *The New York Times* tends to make things fuzzy—for example, its 2012 fourth-quarter earnings report indicated an 8.6% increase of circulation revenue but did not reveal how much of that increase came from digital subscriptions and how much from increasing the price of the print edition (Roberts, 2013). But overall, *The New York Times'* metered model seems to yield the best results. It attained about 799,000 paid digital-only subscribers by the end of Q1 2014 (The New York Times Company, 2014a). As a point of reference, its total average print circulation was 1,217,201 for Sunday and 680,905 for Monday-Friday (The New York Times Company, 2014b). Yet *The New York Times*, operating at the national and international levels, is by no means a typical U.S. newspaper. The overall picture is not nearly as promising. According to the Newspaper Association of America (2013b), which released an industrywide revenue profile based on "the most complete data set of newspaper media revenue performance available,"

digital-only circulation revenue accounted for only 1% of total circulation revenue in 2012. In 2013, subscription rates for most local newspaper sites were estimated to be in the single digits. Gannett's 81 local dailies, for example, attained merely 65,000 digital-only subscribers as of June 2013 (Mutter, 2013). Before long, *The Dallas Morning News* and *The San Francisco Chronicle* dropped their paywalls altogether.

To sum up, given information surplus, news commoditization, and the perceived inferiority of online content, charging anything for general-interest news in digital format has proven difficult. But many papers are still doing it, perhaps because the paywall is no less important as a defensive strategy for their print product, as 35% of newspaper executives believed it would preserve print circulation (Jenner & Fleming, 2011), and *The Arkansas Democrat-Gazette* represents a compelling case—its relatively strong performance in print circulation is attributed to its long-term paywall strategy (Hussman, 2007). However, it is clear that the Web edition has never generated sufficient advertising or subscription revenue to challenge the importance of its print counterpart as the primary revenue driver, and there is no evidence suggesting that it ever will.

6.2. Mobile: The Future of News?

I hear someone asking, “If the computer-based Web edition has reached the dead end, how about mobile?” Indeed, many news executives and digital advocates have turned away from the less-than-successful Web experiment to claim that “the future of news(papers) is mobile.” But we must always go back to user response, asking: “How many people are using mobile devices for news purposes? Are they more engaged? Do they enjoy the mobile reading experience more?” and, from the revenue model perspective, “Are advertising prospects better on mobile?” “Are users more likely to pay for mobile?”

In other words, it is important to examine mobile along the same dimensions where the Web failed, no matter how fancy our smartphone or tablet looks. After all, not too long ago, the same enthusiasm once

underscored newspapers' Web experiment. Although at this stage we do not know as much about users' response to mobile news, preliminary research on mobile news use, mobile advertising, and paying for mobile news has quickly accumulated. Here is a review:

News Use on Mobile Devices

The number of smartphone and tablet users has been growing, but people do not necessarily use multipurpose devices for news purposes. Chyi and Chadha (2012) introduced the concept of “newsfulness” to measure the likelihood of a multipurpose device being used for news, which is calculated by dividing the numbers of users who use the device for news access within a particular time frame (e.g., daily or weekly) by the total number of owners of that device. Based on 2010 survey data of 767 Internet users, their study showed that the desktop/laptop computer ranks the highest (.47), followed by the netbook and the iPad (.35 each), and the iPhone (.33). In other words, 47% of computer owners and about one-third of iPad and iPhone owners accessed news on these devices every day (Chyi & Chadha, 2012). By 2012, 45% of U.S. adults owned a smartphone and 31% owned a tablet (Sasseen, Olmstead, & Mitchell, 2013), but these devices did not get much more newsful—about 36% of smartphone owners and 38% of tablet owners consumed news on the device every day (Pew Research Center's Project for Excellence in Journalism, 2012). A more recent research report released by the Reuters Institute for the Study of Journalism indicated that 31% of Americans access news through their smartphones at least once a week, and 19% do so through their tablets (Lichterman, 2014). To compare news access on desktop/laptop vs. mobile, the latest Pew report noted that, in 2013, 82% of Americans got news on a desktop or laptop; 35% did so frequently. In comparison, 54% said they got news on a mobile device; 21% did so frequently (Pew Research Center's Journalism Project, 2014c). On top of all these, a study by McKinsey revealed that 35% of news consumption remains in newspapers and magazines, 16% in radio and other audio, 41% in TV, and 4% in desktop/laptop. Smartphones and tablets each accounted for only 2% of time spent (Edmonds, 2013). Overall, the

amount of news use on mobile devices is underwhelming, as these findings have suggested. Also note that all these numbers refer to overall mobile news access, and newspapers' mobile offerings are just part of the mix.

Usability is a factor and remains an unsolved problem for many news websites. On mobile platforms, it is even more challenging to present content in user-friendly ways because of tiny displays and touch screens (Nielsen, 2013; Jeong & Han, 2012; for a long list of suggested improvements from tablet news users, see Lamb, 2013). This may help explain why most news app users (58%) said they preferred a traditional, print-like experience over high-tech features such as interactive, audio, and video content (Pew Research Center's Project for Excellence in Journalism, 2012, p. 4).

Mostly importantly, while the number of mobile users will continue to grow in the foreseeable future, so will the supply of news and information (and entertainment) on mobile platforms. It will be information surplus all over again, just on more platforms. As a result, it will be harder, not easier, for any content provider to retain user attention.

Mobile Advertising

Regarding the business prospect of mobile advertising, the following figures provide some baseline information: Overall mobile ad revenue has been growing rapidly, accounting for 19% of total Internet advertising revenue in the fourth quarter of 2013 (Interactive Advertising Bureau, 2012). But is the money going to newspaper firms? The 2013 State of the News Media report cautioned that "the shift to mobile risks further exacerbating the news industry's financial woes: If Web ads bring in only a fraction of the revenues earned by print ads, mobile ads generally bring in only a fraction of what Web ads earn." The disparity between Web and mobile as advertising platforms is reflected in ad rates: the CPM for Web ads averages about \$3.50; for mobile ads, it can be as low as 75 cents (Sasseen et al., 2013). It is therefore not surprising that newspapers'

mobile advertising revenue doubled from 2011 to 2012 but accounted for only 1% of total revenue (Newspaper Association of America, 2013b).

Paying for Mobile News

Are users likely to pay for mobile? A preliminary study conducted in 2010 reported that more than 80% of Internet users would be unlikely or very unlikely to pay for newspaper apps, but younger people would be more likely to pay than older people (Chyi, 2012). A 2010-11 survey of 452 college students showed that 22.5% were likely to pay \$5 for a news app on the iPad while 54% said it was unlikely (Collins, Rabby, & Brown, 2013).

Limited information exists regarding the actual number of paying consumers for mobile news. According to the unaudited Alliance for Audited Media data released by the Pew Research Center, not a single local newspaper in the United States sells more than 50,000 tablet apps (Pew Research Center's Journalism Project, 2014b) or more than 5,000 smartphone apps (Pew Research Center's Journalism Project, 2014a).

Having reviewed these findings, I find it hard to believe that mobile would fare better than the Web as a news platform from the business standpoint. Some scholars who have examined newspapers' mobile strategies seem to support this evaluation (Molyneux, 2014; Nel & Westlund, 2012). As Nel and Westlund (2012) pointed out, "Unless newspapers rethink their current approaches, there is little evidence to indicate that newspapers will have any more economic success with mobile than they have had thus far online" (p. 751).

6.3. Will Social Media Save Newspapers?

Eying the rapidly growing number of users on social networking sites, U.S. newspaper companies have been eager to cultivate their social media audiences on those platforms, too. Each of the top 100 U.S. newspapers

operated at least one Twitter account in 2009 (The Bivings Group, 2009), the same year *The New York Times* hired its first social media editor (Parr, 2009). By 2012, all 66 U.S. newspapers with circulation over 100,000 used Twitter and Facebook to reach social media users. The most common practice is to distribute headlines and hyperlinks, hoping to lure users to their website. However, the number of their social media subscribers was underwhelming. Excluding two statistical outliers (*The New York Times* and *The New York Daily News*), the top 64 U.S. newspapers attained an average of 37,670 Twitter followers and 23,321 Facebook fans, both a fraction of their average weekday print circulation of 209,443 in 2012. Given the limited number of social media followers, the researchers questioned the degree to which newspapers' social media presence contributed traffic to their website (Ju, Jeong, & Chyi, 2014).

Other problems exist. For example, not all users follow the link embedded in a tweet or Facebook post to visit the newspaper site. Some do, but they do not stay long. Based on comScore data, a Pew report indicated that desktop or laptop users who come to a news site from Facebook spend on average 1 minute and 41 seconds on the site, as opposed to 4 minutes and 36 seconds per visit by direct visitors. Direct visitors also view nearly six times as many pages per month (24.8 on average) as those coming via Facebook referrals (4.2 pages), and they visit a site three times as often (10.9) as Facebook visitors (2.9). Such results suggest that converting social media users to dedicated readers is not an easy task (Mitchell, Jurkowitz, & Olmstead, 2014).

In addition, when the Web edition does not have an effective revenue model, how much good can Twitter and Facebook do even if they send tons of users over to the newspaper site?

In sum, the vast majority of U.S. newspapers have found no viable business models for any of their digital offerings. From the Web to mobile and social media, technologies have advanced, but the business model behind them has not. Each time, newspaper firms try to reap the first-mover advantage, giving content away for free before locating a revenue source, granting audience access to aggregators (first Yahoo

and Google, then Apple, Amazon, Facebook, and Twitter), and hoping to garner advertising and circulation revenue in the future. However, in a future where so much news and entertainment content is delivered in such a rapid pace onto screens that are often too small for serious reading, such digital revenue opportunities may never materialize.

7. Conclusion

7.1. Suggestions for Newspaper Executives

It appears that U.S. newspapers are experiencing an identity crisis. Having wandered in this digital jungle for nearly 20 years, many seem to have lost a sense of direction. They do “what has been done or what everyone else is doing” (Molyneux, 2014, p. 17) as opposed to doing what they are good at. In fact, many have forgotten what they are good at or believe what they were good at is no longer relevant. To help newspapers “find themselves,” this book sets out to demystify such thinking by synthesizing relevant research and presenting the reality as is. All the research findings summarized in the previous chapters point to a number of unambiguous conclusions about U.S. newspapers’ digital struggles over the past 20 years. They also serve as friendly reminders to newspaper managers who want to revisit their technology-driven strategy:

1. Acknowledge that the first-mover advantage in the online news business rarely lasts long. Who remembers which newspaper went online first, and who cares anyway?
2. Acknowledge that most online display ads are ineffective and may remain so in the foreseeable future, and there isn’t much newspapers can do about it (no matter how annoying your ads get). In addition, Internet advertising has always been a highly concentrated market—the top 10 companies accounted for 71% of total Internet advertising revenue in 2013, and that ratio hasn’t changed much during the past 10 years (Interactive Advertising Bureau, 2014).

3. Acknowledge that print newspapers do not have to die. Print readership may continue shrinking as a result of information surplus, but this very “dead-tree” format is what most newspaper readers use, prefer, and are willing to pay \$300 to \$500 a year for—this is great news, or, as Ken Doctor (2013) put it, “a good problem to have” (para.15). There are also success stories among print-driven publications. For example, *Community Impact Newspaper*, launched in 2005, has become a chain of free hyperlocal newspapers mailed to more than 1 million households in Texas (Community Impact Newspaper, 2014). Another example is *Seven Days*, a free alternative weekly based in Vermont, which had a print distribution three times larger in 2013 than at its inception in the mid-1990s, and its revenue grew more than 20% from its peak before the recession (Fallows, 2013). In fact, a 2013 study revealed that many of this country’s free newspapers, most of which are print-based and rely solely on advertising, remained “alive and kicking” (Tennant, 2013). From the magazine side, there is *The Week*, a weekly news magazine launched in 2001. Its circulation has grown for 10 consecutive years to 569,392 (The Week, 2014), a noteworthy achievement while major news magazines such as *Newsweek* and *U.S. News and World Report* were struggling for survival (Peters, 2011). Despite different content orientations, the print format works for these publications. Therefore, as long as newspapers drop the misconception that print will die and try to understand why readers prefer print, it is not rocket science to come up with ideas to retain or even expand print readership.
4. Acknowledge that not many people would pay for your digital products. Even among those who are interested in the content, many perceive the digital format as inferior, like fast food or ramen noodles. As for why that is the case, Chapter 5 outlined several plausible reasons, some of which are actually beyond your control. For example, reading text on a screen is just not as enjoyable as reading a printed paper. Moreover, what if human brains indeed prefer tangible over digital materials?

But having a paywall is not necessarily a bad thing. It will reduce online traffic for sure, but it may also do some good—for example, reversing the “cheap stuff is of low quality” perception discussed in Chapter 5. In addition, paywalls may protect print circulation, but the positive effect won’t be dramatic because the online edition has never been strong enough to cannibalize the print product in significant ways, as suggested in Chapters 4 and 5.

5. Acknowledge that digital is not your forte, and “platform-agnostic” is unrealistic for the vast majority of newspapers. This is not to say that you don’t need to offer any digital product, but that is very different from “digital first, print last.” Based on what’s presented in this book, one may conclude that it is easier for newspapers to preserve the print edition than to sell digital products.
6. Acknowledge that print is your asset, not a burden. Print is where your competitive advantage lies. Google does not know how to run a newspaper just as you don’t know how to make money online.
7. Acknowledge that no local newspapers can ever benefit from the economies of distribution to the extent that Google or Yahoo does, and no one can do anything to change that. Simply because you can publish online does not make you a global publication. Some readers (e.g., past and future residents) visit your website from afar, and you may try to charge them (Chyi, 2011; Chyi & Sylvie, 2010b), but they, too, are interested in your local content. In other words, if you’re local, focus on local but make sure you are the authoritative, exclusive source of relevant, useful, high-quality news and information about your market so that people would go find you whether you are online or offline. Without content exclusivity, chasing readers across multiple platforms is wasting the already shrinking resources and may soon tire your journalists out.

8. Acknowledge that newspaper companies may not have to die—they are just no longer “wildly profitable” (Edmonds, Guskin, & Rosenstiel, 2011). The industry’s profit margins will never go back to 25–35%, as many newspapers once enjoyed in the 1990s (Picard, 2008). But even in 2010-11, most newspaper firms were still profitable, with typical profit margins of 5%, which was comparable with the S&P 500 companies’ 6% (Edmonds et al., 2011; Soloski, 2013).
9. Acknowledge that “digital natives” are more likely to own and use mobile devices but are *not* more likely to use them for news purposes (Pew Research Center’s Project for Excellence in Journalism, 2012). And they are not dropping your print newspaper in favor of its online counterparts. They are just far more interested in entertainment than news (Prior, 2007). Therefore, to retain young readers, newspapers should address the fundamental problem and make their content noteworthy (i.e., relevant or interesting). Focusing on distribution technology alone will never do the trick.

Going back to that newspaper publisher who lamented that “All the effort that is going into the website is hurting the print edition. Could we just not do it?” (quoted in Tennant, 2013, p. 82), obviously no one can undo what has been done. But as long as newspaper firms drop the abovementioned misconceptions, value audience research, position themselves in the right market, offer noteworthy content, and deliver it through the most appropriate platforms, albeit not “wildly profitable,” there is certainly a future for this medium.

However, if newspapers continue their technology-driven strategy and wishful thinking, some will die in the digital jungle. And the “unnatural death” of print as the result of a self-fulfilling prophecy will carry profound implications for everyday citizens. The last section of this book will explain why.

7.2. Cultural Implications

No, I'm not going to talk about the effect of vanishing newspapers on civic engagement or political participation, which is a shared concern among many journalism scholars and practitioners but is outside the scope of this book. Since this book focuses on user response to newspaper formats, I want to end it by calling everyone's attention to the plausible-yet-unnecessary death of print media and its impact on culture and civilization.

As stated earlier, all the empirical evidence thus far suggests that the print newspaper as a format does not have to die. But newspaper managers would kill it if they continue what they have been doing: acting upon the misconception of an all-digital future, disinvesting in their print product further, and "running around arguing the sky is falling" (quoted in Lieberman, 2009, para. 9). All these will result in further declines in circulation and advertising revenue, which will then serve as further evidence that the print format is dying.

Imagine that we as individual consumers love a particular product, but since the manufacturer and news media keep telling us that this product is dying, we start to believe we are going to lose it soon, and we may actually end up losing it, despite our preference. I sensed the making of such a self-fulfilling prophecy when a survey indicated that 55% of U.S. Internet users believe traditional media as we know it will not exist in 10 years, even though 67% still prefer getting news from legacy media (Harris Polls, 2010).

Given print is proven to be the most favorable newspaper format in terms of use, engagement, preference, paying intent, and advertising prospect, the future of newspapers hinges on newspaper executives' decision—whether they choose to recognize the value of the print format or to continue acting upon the ill-informed assumption about an all-digital future.

If print newspapers die an unnatural death, a domino effect involving the demise of other print media such as magazines and books may occur.

In that all-digital world, all of us will be reading digital content on a multitude of screens. Print, despite its being a preferred medium, will no longer be a choice.

This would be okay if our brains were “platform-agnostic.” However, reading in print and online constitute very different experiences. A growing body of literature suggests that online reading often involves scanning and skimming and has a negative effect on comprehension and recall, for news (Adam et al., 2007; Eveland Jr et al., 2002; Santana et al., 2013; Tewksbury & Althaus, 2000) but also long-form reading (Rosenwald, 2014). In other words, people absorb more when reading the same material in print—who says that is not important if newspapers are supposed to inform the public? And recent industry practices may push the superficiality of online reading to a new height. In 2013, Yahoo spent £30 million buying an iPhone app, Summly, from a London teenager. What does the app do? It summarizes news articles in 300-400 characters (The Economist, 2013). But why bother since we already have the never-ending 140-character news tweets? And who would be surprised that cognitive neuroscientists suspect online reading negatively affects the way our brains process print materials too, and students around the country are having problems reading the classics because they now seem unbearably long and slow (Rosenwald, 2014)?

It might be too soon to conclude that “digital reading is the intellectual equivalent of empty calories” (Motoko, 2008, para. 14)—although the analogy goes well with my Ramen Noodles Theory of online news. What’s astonishing is that, before anyone (scientists included) truly understands the cognitive effects associated with online reading, American educators and businesses have pushed some “transformative education tools” into K-12 classrooms. In North Carolina, every student in 18 of Guilford County’s 24 middle schools received a custom-built Android tablet in 2013 for class work, assignments, and educational games. And the rationale is cost-cutting. Arne Duncan, the U.S. secretary of education, couldn’t understand why this country spends \$7 billion to \$8 billion a year on textbooks when electronic devices could make textbooks better and cheaper (Rotella, 2013). And the chief executive of

the company which supplied those tablets said that education is “ripe for disruption” (quoted in Rotella, 2013).

What is happening in those classrooms parallels the technology-driven approach dominating American newsrooms during the past 20 years, both suggesting that technological determinism as a way of thinking has become so pervasive in this society, often tangled with commercial interest, and its progressive-sounding narrative is hard to rebuff even in a free marketplace of ideas. But if McLuhan was right about the medium being the message, we must closely monitor the effect of digitization on reading and learning.

As Robert Capps of *Wired* magazine put it, “We now favor flexibility over high fidelity, convenience over features, quick and dirty over slow and polished. Having it here and now is more important than having it perfect” (Capps, 2009, para. 9). Although research suggests that most newspaper readers are still able to distinguish a normal good (print) from an inferior good (digital), there is no guarantee that technological fundamentalists would not push the aforementioned self-fulfilling prophecy further, causing the undesirable and unnecessary death of print media. In the post-print world, the dominance of digital media will lead to further marginalization of quality content, which is, simply put, what used to take time to produce and consume. When most readers pick up a publication not because of its quality but because it is fast, cheap, and accessible, we are living in the age of inferiority.

Therefore, I urge newspaper executives to change their technology-driven approach that is also self-destructive. And please do so before it is too late—when we still value quality.

It is in this sense that everyone should care about the future of newspapers.

REFERENCES

- ACKERMAN, J. M., NOCERA, C. C., & BARGH, J. A. (2010). Incidental haptic sensations influence social judgments and decisions. *Science*, 328(5986), 1712–1715. doi:10.1126/science.1189993
- ADAM, P. S., QUINN, S., & EDMONDS, R. (2007). *Eyetracking the news: A study of print and online reading*. St. Petersburg, Fla.: Poynter Institute.
- AHRENS, F. (2009, October 27). The accelerating decline of newspapers. *The Washington Post*. Retrieved from <http://www.washingtonpost.com/wp-dyn/content/article/2009/10/26/AR2009102603272.html>
- ALBARRAN, A. B. (2010). *The media economy*. Hoboken: Routledge.
- AMERICAN PRESS INSTITUTE. (2006). *Blue print for transformation*. Retrieved from http://www.americanpressinstitute.org/~media/NAAFoundation/Files/Research/NewspaperNext/N2_Blueprint-for-Transformation.ashx
- AMERICAN PRESS INSTITUTE. (2008). *Newspaper Next 2.0: Making the leap beyond "Newspaper Companies."*
- AMERICAN PRESS INSTITUTE, & ITZBELDEN. (2009). *Online revenue initiatives*. Retrieved from <http://www.slideshare.net/Mediatrend/online-rev2009-final>
- ANTHONY, S. D., & GILBERT, C. G. (2006). Can the newspaper industry stare disruption in the face? "Lessons learned from past failures can help to ensure future triumphs." Retrieved October 22, 2011, from <http://www.nieman.harvard.edu/reportsitem.aspx?id=100464>
- APPLE, C. (2011, November 21). Newspapers can't make money online because "advertising costs too darn much." Retrieved August 17, 2014, from <http://www.poynter.org/latest-news/mediawire/153854/newspapers-cant-make-money-online-because-advertising-costs-too-darn-much/>
- AUDIT BUREAU OF CIRCULATIONS. (2007, July 17). ABC, Scarborough Research and NAA unveil details of new Audience-FAX initiative integrating circulation, readership and online measurements. Retrieved October 18, 2008, from <http://www.accessabc.com/press/press071707.htm>
- AVRIEL, E. (2007, February 7). NY Times publisher: Our goal is to manage the transition from print to internet. *Haaretz Daily Newspaper*. Retrieved from <http://www.haaretz.com/print-edition/business/ny-times-publisher-our-goal-is-to-manage-the-transition-from-print-to-internet-1.212256>
- BBC. (2009, October 9). Websites "need to pay for news." Retrieved December 6, 2012, from <http://news.bbc.co.uk/2/hi/8298507.stm>
- BBC NEWS. (2006, May 10). YouTube hits 100m videos per day. Retrieved from <http://news.bbc.co.uk/1/hi/technology/5186618.stm>

REFERENCES

BBC NEWS. (2012, October 20). Brazilian newspapers pull out of Google News. Retrieved June 2, 2013, from <http://www.bbc.co.uk/news/world-latin-america-20018221>

BBC NEWS. (2013, February 1). Google settles French newspaper links dispute. Retrieved June 2, 2013, from <http://www.bbc.co.uk/news/technology-21302168>

BORRELL & ASSOCIATES. (2001). The free vs. paid debate: Newspapers must decide between short-term ROI and long-term goals. Retrieved from <http://www.borrellassociates.com/reports/industry-papers/online-archives/112-the-free-vs-paid-debate>

BORRELL & ASSOCIATES. (2003, July 29). What newspaper Web sites earn? Retrieved from <http://www.borrellassociates.com/research.html>

BOWER, J. L., & CHRISTENSEN, C. M. (1995). Disruptive technologies: Catching the wave. *Harvard Business Review*, (January-February), 43–53.

BROMLEY, R. V., & BOWLES, D. (1995). Impact of Internet on use of traditional news media. *Newspaper Research Journal*, 16(2), 14–27.

BROOK, S. (2006). One newspaper reader worth up to 100 online users in ad revenue. *The Guardian*. Retrieved from <http://www.guardian.co.uk/media/2006/feb/27/pressandpublishing.newmedia>

BULLAS, J. (2012, May 23). 30 mind numbing youtube facts, figures and statistics-infographic. Retrieved November 24, 2013, from <http://www.jeffbullas.com/2012/05/23/35-mind-numbing-youtube-facts-figures-and-statistics-infographic/#x=yDL5kzLT6tHDsJ.99>

BUSTERNA, J. C. (1987). The cross-elasticity of demand for national newspaper advertising. *Journalism Quarterly*, 64, 346–351.

BUSTERNA, J. C., & PICARD, R. G. (1993). *Joint operating agreements: The newspaper preservation act and its application*. Norwood, NJ: Ablex.

BUTTRY, S. (2011, September 26). 5 years later: Newspaper Next didn't change the news biz, but it changed me. Retrieved October 22, 2011, from <http://stevebuttry.wordpress.com/2011/09/26/5-years-later-newspaper-next-didnt-change-the-news-biz-but-it-changed-me/>

CAPPS, R. (2009, August 24). The good enough revolution: When cheap and simple is just fine. *Wired*, 17(9). Retrieved from http://www.wired.com/gadgets/miscellaneous/magazine/17-09/ff_goodenough?currentPage=1

CARLSON, D. (2003). The history of online journalism. In K. Kawamoto (Ed.), *Digital journalism* (pp. 31–55). Lanham, MD: Rowman & Littlefield.

CARR, D. (2012, November 4). Publishers abroad take on Google. *New York Times*, p. B1.

REFERENCES

- CASE, B. (2009, October 11). Dallas Morning News takes premium value approach. *Dallas Morning News*. Retrieved from http://www.dallasnews.com/sharedcontent/dws/bus/stories/DN-DMN_11bus.ART0.State.Edition1.3cf5397.html
- CHAFFEY, D. (2013, November 13). Display advertising clickthrough rates. Retrieved August 17, 2014, from <http://www.smartinsights.com/internet-advertising/internet-advertising-analytics/display-advertising-clickthrough-rates/>
- CHONEY, S. (2011, March 14). Online news readership overtakes newspapers. Retrieved January 21, 2014, from <http://www.nbcnews.com/technology/online-news-readership-overtakes-newspapers-124383>
- CHRISTENSEN, C. M. (1997). *The innovator's dilemma: The revolutionary book that will change the way you do business*. New York: HarperBusiness.
- CHYI, H. I. (2002). No one would pay for it? Web content as inferior goods. In *Proceedings of the Fifth World Media Economics Conference "Media Firms: Structures, Operations, and Performance"*, Turku, Finland.
- CHYI, H. I. (2005a). No one would pay for it? Web content as inferior goods. In *E-merging media: Communication and the media economy of the future* (p. 45). Berlin: Springer-Verlag.
- CHYI, H. I. (2005b). Willingness to pay for online news: An empirical study on the viability of the subscription model. *Journal of Media Economics*, 18(2), 131–142.
- CHYI, H. I. (2006). Re-examining the market relation between online and print Newspapers: The case of Hong Kong. In X. Li (Ed.), *Internet newspapers* (pp. 193–205). Mahwah, NJ: Lawrence Erlbaum.
- CHYI, H. I. (2009). Information surplus in the digital age: Impact and implications. In Z. Papacharissi (Ed.), *Journalism and citizenship: New agendas* (pp. 91–107). New York: Taylor & Francis.
- CHYI, H. I. (2011). Online readers geographically more dispersed than print readers. *Newspaper Research Journal*, 32(3), 97–111.
- CHYI, H. I. (2012). Paying for what? How much? And why (not)? Predictors of paying intent for multiplatform newspapers. *International Journal on Media Management*, 14(3), 227–250.
- CHYI, H. I. (2013). Are “digital natives” dropping print newspapers? A national survey of college newspaper advisers. *ISOJ – The Official Research Journal of the International Symposium on Online Journalism*, 3(1), 5–18.
- CHYI, H. I., & CHADHA, M. (2012). News on new devices: Is multi-platform news consumption a reality? *Journalism Practice*, 6(4), 431–449.

REFERENCES

CHYI, H. I., & CHANG, H.-C. (2009). Examining the use of and preference for online news in the context of intermedia competition. In L. Leung, A. Fung, & P. S. N. Lee (Eds.), *Embedding into our lives: New opportunities and challenges of the Internet* (pp. 101–123). Hong Kong: Chinese University Press.

CHYI, H. I., & HUANG, J. S. (2011). Demystifying the demand relationship between online and print products under one newspaper brand: The case of Taiwan and the emergence of a universal pattern. *Asian Journal of Communication*, 21(3), 243–261.

CHYI, H. I., & LASORSA, D. L. (1999). Access, use and preference for online newspapers. *Newspaper Research Journal*, 20, 2–13.

CHYI, H. I., & LASORSA, D. L. (2002). An explorative study on the market relation between online and print newspapers. *The Journal of Media Economics*, 15(2), 91–106.

CHYI, H. I., & LEE, A. M. (2012). Will the Internet disrupt? A reality check on format preference for traditional and digital content across five media. Presented at the 10th World Media Economics and Management Conference, Thessaloniki, Greece.

CHYI, H. I., & LEE, A. M. (2013). Online news consumption: A structural model linking preference, use, and paying intent. *Digital Journalism*, 1(2), 194–211. doi:10.1080/21670811.2012.753299

CHYI, H. I., & LEWIS, S. C. (2009). Use of online newspaper sites lags behind print editions. *Newspaper Research Journal*, 30(4), 38–53.

CHYI, H. I., LEWIS, S. C., & ZHENG, N. (2012). A matter of life and death? Examining how newspapers covered the newspaper “crisis.” *Journalism Studies*, 13(3), 305–324.

CHYI, H. I., LEWIS, S. C., & ZHENG, N. (2013). Is Google “stealing” your content? Examining how the news industry framed Google in an era of news aggregation. Presented at the the annual conference of the Association for Education in Journalism and Mass Communication, Washington, DC.

CHYI, H. I., & SYLVIE, G. (1998). Competing with whom? Where? And how? A structural analysis of the electronic newspaper market. *Journal of Media Economics*, 11(2), 1–18.

CHYI, H. I., & SYLVIE, G. (2000). Online newspapers in the U.S.: Perceptions of markets, products, revenue, and competition. *International Journal on Media Management*, 2(2), 13–21.

CHYI, H. I., & SYLVIE, G. (2001). The medium is global; the content is not: The role of geography in online newspaper markets. *Journal of Media Economics*, 14(4), 231–248.

CHYI, H. I., & SYLVIE, G. (2010a). Are long-distance users an inconvenient truth? Profiling U.S. newspapers’ online readership in the dual-geographic market. *International Journal on Media Management*, 12(2), 1–20.

REFERENCES

- CHYI, H. I., & SYLVIE, G. (2010b). Are long-distance users an inconvenient truth? Profiling U.S. newspapers' online readership in the dual-geographic market. *International Journal on Media Management*, 12(2), 93–112.
- CHYI, H. I., & YANG, M. J. (2009). Is online news an inferior good? Examining the economic nature of online news among users. *Journalism & Mass Communication Quarterly*, 86(3), 594–612.
- CHYI, H. I., & YANG, M. J. (2012). Who would miss getting news online and why (not)? In F. L. F. Lee, L. Leung, J. L. Qiu, & D. S. C. Chu (Eds.), *Frontiers in new media research* (pp. 173–190). New York: Routledge.
- CHYI, H. I., YANG, M. J., LEWIS, S. C., & ZHENG, N. (2010). Use of and satisfaction with newspaper sites in the local market: Exploring differences between hybrid and online-only users. *Journalism & Mass Communication Quarterly*, 87(1), 62–83.
- CHYI, H. I., YANG, M. J., SYLVIE, G., LEWIS, S. C., & ZHENG, N. (2013). One product, three markets: How market segmentation informs newspapers about their onlinereadership. In G. Sylvie (Ed.), *Newsroom decision-making: Under new management* (pp. 223–255). Lisbon: Mediaxxi Formalpress.
- COLLINS, S., RABBY, M., & BROWN, T. (2013). Few students willing to pay for tablet news content. *Newspaper Research Journal*, 34(1), 62–73.
- COMMUNITY IMPACT NEWSPAPER. (2014, August 24). About us. Retrieved August 25, 2014, from <http://impactnews.com/about-us/about-us-main>
- CONWAY, M., & PATTERSON, J. R. (2008). Today's top story? An agenda-setting and recall experiment involving television and internet news. *Southwestern Mass Communication Journal*, 24(1), 31–48.
- DANNEELS, E. (2004). Disruptive technology reconsidered: A critique and research agenda. *Journal of Product Innovation Management*, 21(4), 246–258.
- DAWBER, A. (2009, October 10). Murdoch blasts search engine “kleptomaniacs.” Retrieved June 4, 2013, from <http://www.independent.co.uk/news/media/online/murdoch-blasts-search-engine-kleptomaniacs-1800569.html>
- DE WAAL, E., & SCHOENBACH, K. (2010). News sites' position in the mediascape: Uses, evaluations and media displacement effects over time. *New Media and Society*, 12(3), 477–496.
- DE WAAL, E., SCHOENBACH, K., & LAUF, E. (2005). Online newspapers: A substitute or complement for print newspapers and other information channels? *Communications*, 30(January), 55–72.
- DICK, B. (2009, January 14). Spending analog dollars to get digital pennies. Retrieved from <http://www.tvtechnology.com/default.aspx?tabid=204&entryid=1097>

REFERENCES

DIMMICK, J., CHEN, Y., & LI, Z. (2004). Competition between the Internet and traditional news media: The gratification-opportunities niche dimension. *Journal of Media Economics*, 17, 19–33.

DOCTOR, K. (2011, March 7). Nine questions on the Dallas Morning News pay plan. Retrieved March 28, 2011, from <http://newsonomics.com/nine-questions-on-the-dallas-morning-news-pay-plan/>

DOCTOR, K. (2013, November 14). The newsonomics of the surprisingly persistent appeal of newsprint. Retrieved December 26, 2013, from <http://www.niemanlab.org/2013/11/the-newsonomics-of-the-surprisingly-persistent-appeal-of-newsprint/>

DOOLEY, R. (2011, February 18). Does paper outweigh digital? Retrieved February 10, 2014, from <http://www.neurosciencemarketing.com/blog/articles/paper-weight-digital.htm>

DUTTA-BERGMAN, M. J. (2004). Complementarity in consumption of online news types across traditional and new media. *Journal of Broadcasting & Electronic Media*, 48, 41–60.

DVORAK, J. C. (2004, August 17). The myth of disruptive technology PCMag.com. Retrieved October 23, 2011, from http://www.pcmag.com/article2/0,2817,1628049,00.asp#fbid=nYdYGFw99cv?disqus_thread

EDITOR & PUBLISHER INTERACTIVE. (1999). MediaInfo links: Online media directory. Retrieved from <http://www.mediainfo.com/ephome/npaper/nphtm/statistics.htm>

EDMONDS, R. (2013, May 16). New research finds 92 percent of time spent on news consumption is still on legacy platforms. Retrieved May 21, 2013, from <http://www.poynter.org/latest-news/business-news/the-biz-blog/212550/new-research-finds-92-percent-of-news-consumption-is-still-on-legacy-platforms/>

EDMONDS, R. (2014, February 24). NAA: “Print only” still more than half of newspaper audience even as digital grows. Retrieved August 31, 2014, from <http://www.poynter.org/latest-news/business-news/the-biz-blog/240669/even-as-digital-grows-more-than-half-of-reported-newspaper-audience-is-print-only/>

EDMONDS, R., GUSKIN, E., MITCHELL, A., & JURKOWITZ, M. (2013, May 7). Newspapers: By the numbers. Retrieved December 20, 2013, from <http://stateofthedia.org/2013/newspapers-stabilizing-but-still-threatened/newspapers-by-the-numbers/>

EDMONDS, R., GUSKIN, E., & ROSENSTIEL, T. (2011). Newspapers: Missed the 2010 Media Rally. Retrieved August 25, 2014, from <http://stateofthedia.org/2011/newspapers-essay/#newspapers-not-dying-but-no-longer-wildly-profitable>

ELLIS, J. (2011, October 27). The path of disruption: Did Newspaper Next succeed in transforming newspapers? Retrieved September 27, 2013, from <http://www.niemanlab.org/2011/10/the-path-of-disruption-did-newspaper-next-succeed-in-transforming-newspapers/>

REFERENCES

- ENDA, J., & MITCHELL, A. (2013). Americans show signs of leaving a news outlet, citing less information. Retrieved May 10, 2014, from <http://stateofthedia.org/2013/special-reports-landing-page/citing-reduced-quality-many-americans-abandon-news-outlets/>
- EVELAND JR, W. P., SEO, M., & MARTON, K. (2002). Learning from the news in campaign 2000: An experimental comparison of TV news, newspapers, and online news. *Media Psychology*, 4(4), 353–378.
- FALLON, K. (2011, September 9). New York Times will end print edition (eventually), publisher says. Retrieved October 9, 2011, from <http://www.theatlantic.com/entertainment/archive/2010/09/new-york-times-will-end-print-edition-eventually-publisher-says/62731/>
- FALLOWS, J. (2013, September 20). Strange tales from the north country: A profitable (print) newspaper. Retrieved August 25, 2014, from <http://www.theatlantic.com/national/archive/2013/09/strange-tales-from-the-north-country-a-profitable-print-newspaper/279846/>
- FARHI, P. (2008, October 1). Don't blame the journalism. *American Journalism Review*, 30(5). Retrieved from <http://www.ajr.org/article.asp?id=4623>
- FEDERAL TRADE COMMISSION. (2009, December 1). News media workshop December 1-2, 2009. Retrieved April 1, 2010, from http://htc-01.media.globix.net/COMP008760MOD1/ftc_web/FTCindex.html#Dec01_09
- FIDLER, R. (1997). *Mediamorphosis: Understanding new media*. Thousand Oaks, CA: Pine Forge Press.
- FRAGA, I. (2012, October 18). Brazilian newspapers leave Google News en masse. Retrieved December 7, 2012, from <http://knightcenter.utexas.edu/blog/00-11803-brazilian-newspapers-leave-google-news-en-masse>
- FRIEDMAN, D. (2003, November 5). From free to fee in 10 easy steps. Retrieved September 18, 2011, from <http://www.ojr.org/ojr/business/1068080483.php>
- GENTZKOW, M. (2007). Valuing new goods in a model with complementarities: Online newspapers. *American Economic Review*, 97(3), 713–744.
- GHOSH, R. A. (1998). Cooking pot markets: an economic model for the trade in free goods and services on the Internet. *First Monday*, 3(2). doi:10.5210/fm.v3i2.580
- GILBERT, C. G. (2013, April 19). *Strengthening journalism in an era of digital disruption*. Presented at the 14th International Symposium on Online Journalism, Austin, Texas. Retrieved from <http://vimeo.com/71031794>
- GLENN, A. A. (2011, March 8). Christensen: News organizations, facing disruptive innovation, must rethink their “job.” Retrieved October 6, 2013, from http://archive.knightdigitalmediacenter.org/leadership_blog/comments/20110307_christensen_news_organizaions_facing_disruptive_innovation_must_re/

REFERENCES

GRAYBEAL, G. M. (2011). Newspapers publish less in print; focus on Web to attract young readers. *Newspaper Research Journal*, 32(1), 90–97.

GROVE, L. (2013, December 17). How the newspaper business became a “f**king disgrace.” Retrieved December 19, 2013, from <http://www.thedailybeast.com/articles/2013/12/17/how-the-newspaper-business-became-a-f-king-disgrace.html>

GUSKIN, E. (2013, June 25). Newspaper newsrooms suffer large staffing decreases [Pew Research Center]. Retrieved May 10, 2014, from <http://www.pewresearch.org/fact-tank/2013/06/25/newspaper-newsrooms-suffer-large-staffing-decreases/>

HARGROVE, T., MILLER, J., & STEMPEL, G. H. (2011). Study compares print, online use of metro, community newspapers. *Newspaper Research Journal*, 32(1), 84–89.

HARRIS POLLS. (2010, October 28). Troubles for traditional media: Both print and television. Retrieved September 22, 2013, from <http://www.harrisinteractive.com/NewsRoom/HarrisPolls/tabid/447/mid/1508/articleId/604/ctl/ReadCustom%20Default/Default.aspx>

HELFT, M., & LOHR, S. (2006, November 20). 176 Newspapers to form a partnership with Yahoo. *The New York Times*. Retrieved from <http://www.nytimes.com/2006/11/20/technology/20yahoo.html>

HERBERT, J., & THURMAN, N. (2007). Paid content strategies for news websites. *Journalism Practice*, 1(2), 208–226.

HINDMAN, M. (2011). *Less of the same: The lack of local news on the Internet*. FCC-Commissioned.

HODIERNE, R. (2009). Is there life after newspapers? *American Journalism Review*, 31(February/March). Retrieved from <http://www.ajr.org/Article.asp?id=4679>

HOLTON, A. E., & CHYI, H. I. (2012). News and the overloaded consumer: Factors influencing information overload among news consumers. *Cyberpsychology, Behavior, and Social Networking*, 15(11), 619–624.

HOSKINS, C., MCFADYEN, S., & FINN, A. (2004). *Media economics: Applying economics to new and traditional media*. Thousand Oaks, CA: Sage.

HUANG, J. S., YANG, M. J., & CHYI, H. I. (2013). Friend or foe? Examining the relationship between news portals and newspaper sites in Taiwan. *Chinese Journal of Communication*, 6(1), 103–119. doi:10.1080/17544750.2012.753502

HUSSMAN, W. E. J. (2007, May 7). How to sink a newspaper. *Wall Street Journal*, p. A15.

INTERACTIVE ADVERTISING BUREAU. (2012). *2011 Internet advertising revenue full-year report*. Retrieved from http://www.iab.net/media/file/IAB_Internet_Advertising_Revenue_Report_FY_2011.pdf

REFERENCES

- INTERACTIVE ADVERTISING BUREAU. (2014). *2013 Internet advertising revenue full-year report*. Retrieved from http://www.iab.net/media/file/IAB_Internet_Advertising_Revenue_Report_FY_2013.pdf
- ISAACSON, W. (2009, February 5). How to save your newspaper. *Time*. Retrieved from <http://www.time.com/time/business/article/0,8599,1877191,00.html>
- ISBELL, K. (2010). *The rise of the news aggregator: Legal implications and best practices* (SSRN Scholarly Paper No. ID 1670339). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1670339>
- JARVIS, J. (2006, June 29). Spitting on the bonfire. Retrieved September 27, 2013, from <http://buzzmachine.com/2006/06/29/1706/>
- JARVIS, J. (2007, September 20). Times deselected. Retrieved from <http://www.buzzmachine.com/2007/09/17/times-deselected/>
- JENNER, M. M. (2012, September 15). Two-thirds of newspaper publishers optimistic about the future. Retrieved September 18, 2012, from <http://rjionline.org/news/two-thirds-newspaper-publishers-optimistic-about-future>
- JENNER, M. M., & FLEMING, K. (2011, April 26). *The push to paid: Attitudes of publishers toward paid content*. Reynolds Journalism Institute, University of Missouri. Retrieved from <http://www.niemanlab.org/pdfs/rjipaidcontent.pdf>
- JEONG, W., & HAN, H. J. (2012). Usability study on newspaper mobile websites. *OCLC Systems & Services: International Digital Library Perspectives*, 28(4), 180–198. doi:10.1108/10650751211279120
- JU, A., JEONG, S. H., & CHYI, H. I. (2014). Will social media save newspapers? Examining the effectiveness of Facebook and Twitter as news platforms. *Journalism Practice*, 8(1), 1–17. doi:10.1080/17512786.2013.794022
- JUPITER MEDIA METRIX. (2003, January 6). Bumpy road from free to fee: Paid online content revenues to reach only \$5.8 billion by 2006, reports jupiter media metrix. Retrieved from http://banners.noticiasdot.com/termometro/boletines/docs/consultoras/jupiter/2002/jupiter_Paid_Online_Content_Revenues.pdf
- JUST, D., SIGIRCI, O., & WANSINK, B. (2014). Lower buffet prices lead to less taste satisfaction. In *Experimental Biology 2014*. San Diego.
- KAUFHOLD, K. (2010). Dark days ahead. In M. E. McCombs, A. W. Hinsley, K. Kaufhold, & S. C. Lewis (Eds.), *The future of news: An agenda of perspectives* (pp. 17–30). San Diego, CA: Cognella.
- KAWAMOTO, K. (2003). Digital journalism: Emerging media and the changing horizons of journalism. In K. Kawamoto (Ed.), *Digital journalism* (pp. 1–29). Lanham, MD: Rowman & Littlefield.

REFERENCES

KENDALL, B., & CATAN, T. (2009, December 2). FTC workshop examines journalism in Internet age. *Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424052748704107104574569661532881656.html>

KINSLEY, M. (2009, February 10). You can't sell news by the slice. Retrieved September 18, 2011, from http://www.nytimes.com/2009/02/10/opinion/10kinsley.html?_r=1&ref=todayspaper

LAMB, Y. R. (2013). All the news that fits on tablets: An analysis of news consumption and best practices. Presented at the Association for Education in Journalism and Mass Communication, Washington, D.C. Retrieved from <http://www.aejmc.org/home/wp-content/uploads/2013/08/Yanick-Rice-Lamb.pdf>

LANCASTER, K. J. (1966). A new approach to consumer theory. *Journal of Political Economy*, 74(2), 132–157.

LANGVELD, M. (2009, April 13). Print is still king: Only 3 percent of newspaper reading happens online. Retrieved September 19, 2012, from <http://www.niemanlab.org/2009/04/print-is-still-king-only-3-percent-of-newspaper-reading-actually-happens-online/>

LANGVELD, M. (2010, April 5). Is print still king? Has online made a move? Updating a controversial post. Retrieved May 28, 2010, from <http://www.niemanlab.org/2010/04/is-print-still-king-has-online-made-a-move-updating-a-controversial-post/>

LEE, A. M., & CHYI, H. I. (2014). When newsworthy is not noteworthy: Examining the value of news from the audience's perspective. *Journalism Studies*, 15(6), 807-820. doi: 10.1080/1461670X.2013.841369

LEE, P. S. N., & LEUNG, L. (2008). Assessing the displacement effects of the Internet. *Telematics and Informatics*, 25(3), 145–155.

LEVY, D. A., & NIELSEN, R. K. (EDS.). (2010). *The changing business of journalism and its implications for democracy*. Reuters Institute for the Study of Journalism.

LICHTERMAN, J. (2014, June 11). More people around the world are getting news on phones, but paying for it is still rare. Retrieved August 21, 2014, from <http://www.niemanlab.org/2014/06/more-people-around-the-world-are-getting-news-on-phones-but-paying-for-it-is-still-rare/>

LIEBERMAN, D. (2009, March 18). Extra! Extra! Are newspapers dying? Closings scare some; others say no way will newsrooms die. *USA Today*, p. 1B.

LOWREY, W. (2009). Institutional roadblocks: Assessing journalism's response to changing audiences. In Z. Papacharissi (Ed.), *Journalism and citizenship: New agendas* (pp. 44–67). New York: Routledge.

MCDOWELL, W. S. (2011). The brand management crisis facing the business of journalism. *International Journal on Media Management*, 13(1), 37–51.

REFERENCES

- MCINTYRE, D. A. (2009, March 9). The 10 most endangered newspapers in America. *Time*. Retrieved from <http://www.time.com/time/business/article/0,8599,1883785,00.html>
- MIGA, A. (2009, May 6). John Kerry: Newspapers resemble endangered species. *Editor & Publisher*. Retrieved from http://www.editorandpublisher.com/eandp/news/article_display.jsp?vnu_content_id=1003969724
- MILLWARD BROWN. (2009). Using neuroscience to understand the role of direct mail. Retrieved February 10, 2014, from <https://www.millwardbrown.com/Insights/CaseStudies/NeuroscienceDirectMail.aspx>
- MINDICH, D. T. Z. (2005). *Tuned out: Why Americans under 40 don't follow the news*. New York: Oxford University Press.
- MITCHELL, A., JURKOWITZ, M., & OLMSTEAD, K. (2014, March 13). Social, search and direct: Pathways to digital news. Retrieved August 19, 2014, from <http://www.journalism.org/2014/03/13/social-search-direct/>
- MOLYNEUX, L. (2014). Mobile news business models: Promise or pitfall? Presented at the Association for Education in Journalism and Mass Communication, Montreal, Canada.
- MOTOKO, R. (2008, July 27). Literacy debate: Online, R u really reading? Retrieved August 30, 2014, from http://www.nytimes.com/2008/07/27/books/27reading.html?pagewanted=all&_r=0
- MUELLER, J., & KAMERER, D. (1995). Reader preference for electronic newspapers. *Newspaper Research Journal*, 16(3), 2–13.
- MUTTER, A. D. (2013, September 25). How many people really pay for digital news? Retrieved December 23, 2013, from <http://newsosaur.blogspot.ca/2013/09/how-many-people-really-pay-for-digital.html>
- MYLLYLAHTI, M. (2013). Newspaper paywalls—the hype and the reality: A study of how paid news content impacts on media corporation revenues. *Digital Journalism*, 1–16. doi:10.1080/21670811.2013.813214
- NEL, F., & WESTLUND, O. (2012). The 4C's of mobile news: Channels, conversation, content and commerce. *Journalism Practice*, 6(5-6), 744–753. doi:10.1080/17512786.2012.667278
- NEWSPAPER ASSOCIATION OF AMERICA. (2012a, March 14). Advertising expenditures: Annual. Retrieved March 18, 2012, from <http://www.naa.org/Trends-and-Numbers/Advertising-Expenditures/Annual-All-Categories.aspx>
- NEWSPAPER ASSOCIATION OF AMERICA. (2012b, September 4). Newspaper circulation volume. Retrieved March 18, 2013, from <http://www.naa.org/Trends-and-Numbers/Circulation-Volume/Newspaper-Circulation-Volume.aspx>

REFERENCES

NEWSPAPER ASSOCIATION OF AMERICA. (2012c, December 26). Newspaper Web audience. Retrieved December 22, 2013, from <http://www.naa.org/Trends-and-Numbers/Newspaper-Websites/Newspaper-Web-Audience.aspx>

NEWSPAPER ASSOCIATION OF AMERICA. (2013a, March 25). Readership. Retrieved December 22, 2013, from <http://www.naa.org/Trends-and-Numbers/Readership.aspx>

NEWSPAPER ASSOCIATION OF AMERICA. (2013b, April 8). The American newspaper media industry revenue profile 2012. Retrieved November 3, 2013, from <http://www.naa.org/Trends-and-Numbers/Newspaper-Revenue/Newspaper-Media-Industry-Revenue-Profile-2012.aspx>

NEWS&TECH. (2013, March 18). Updated: N.A. papers with paywalls. Retrieved May 20, 2013, from http://www.newsandtech.com/stats/article_22ac1efa-2466-11e1-9c29-0019bb2963f4.html

NEWS&TECH. (2014, May 16). N.A. papers with paywalls. Retrieved from <http://www.newsandtech.com/stats/paywalls.html>

NIELSEN, J. (1997, October 1). How users read on the Web. Retrieved February 9, 2014, from <http://www.nngroup.com/articles/how-users-read-on-the-web/>

NIELSEN, J. (2008, June 9). Writing style for print vs. Web. Retrieved February 9, 2014, from <http://www.nngroup.com/articles/writing-style-for-print-vs-web/>

NIELSEN, J. (2010, July 2). iPad and Kindle reading speeds. Retrieved February 9, 2014, from <http://www.nngroup.com/articles/ipad-and-kindle-reading-speeds/>

NIELSEN, J. (2013, August 5). Tablet usability. Retrieved August 20, 2014, from <http://www.nngroup.com/articles/tablet-usability/>

OLIVAREZ-GILES, N. (2011, March 15). Web tops newspapers as news source for first time. Retrieved January 21, 2014, from <http://articles.latimes.com/2011/mar/15/business/la-fi-web-newspapers-20110315>

OLMSTEAD, K., MITCHELL, A., & ROSENSTIEL, T. (2011). Online: Key questions facing digital news. Retrieved August 17, 2014, from <http://stateofthemediamedia.org/2011/online-essay/>

ONLINE PUBLISHERS ASSOCIATION. (2004, February). Multi-channel media brands: Attitudinal and usage study. Retrieved from http://onlinepubs.ehclients.com/images/pdf/140_W_opa_multichannel_media_brand_study_nov03.pdf

OUTING, S. (2002, August 14). Examining paid content's future. Retrieved from http://www.editorandpublisher.com/editorandpublisher/features_columns/stop_archive.jsp

PALFREY, J., & GASSER, U. (2008). *Born digital: understanding the first generation of digital natives*. Basic Civitas Books.

PAPER CUTS. (2013). Layoffs and buyouts at U.S. newspapers. Retrieved March 30, 2010, from <http://newspaperlayoffs.com>

REFERENCES

- PARR, B. (2009, May 26). The New York Times hires a social media editor; does it need one? Retrieved August 22, 2014, from <http://mashable.com/2009/05/26/nyt-social-media-editor/>
- PATON, J. (2010, December 2). John Paton's Dec. 2 presentation at INMA Transformation of News Summit in Cambridge, Mass. Retrieved October 23, 2011, from <http://jxpaton.wordpress.com/2010/12/02/presentation-by-john-paton-at-inma-transformation-of-news-summit-in-cambridge-mass/>
- PATTERSON, T. E. (2007). *Creative destruction: An exploratory look at news on the Internet*. Carnegie/Knight Task Force Report on the Future of Journalism Education, Shorenstein Center, Kennedy School of Government.
- PENENBERG, A. L. (2004, November 24). Newspapers should really worry. *Wired*. Retrieved from <http://www.wired.com/culture/lifestyle/news/2004/11/65813?currentPage=all>
- PÉREZ-PEÑA, R. (2008, September 6). Times plans to combine sections of the paper. *New York Times*, p. C3.
- PÉREZ-PEÑA, R. (2010, March 24). It's official: 2009 was worst year for the newspaper business in decades. *New York Times*. Retrieved from <http://mediadecoder.blogs.nytimes.com/2010/03/24/its-official-2009-was-worst-year-for-the-newspaper-business-in-decades/?src=tpwtw>
- PETERS, J. W. (2011, March 13). Small but feisty, The Week grows as other magazines lag. Retrieved August 24, 2014, from http://www.nytimes.com/2011/03/14/business/media/14magazine.html?pagewanted=all&_r=0
- PEW INTERNET & AMERICAN LIFE PROJECT. (2006). Online news: For many home broadband users, the Internet is a primary news source. Retrieved from http://www.pewinternet.org/pdfs/PIP_News.and.Broadband.pdf
- PEW PROJECT FOR EXCELLENCE IN JOURNALISM. (2010). Network TV. Retrieved October 24, 2010, from stateofthedia.org/2010/network-tv-summary-essay/audience/
- PEW RESEARCH CENTER FOR THE PEOPLE AND THE PRESS. (2010). Americans spending more time following the news. Retrieved April 15, 2011, from www.people-press.org/2010/09/12/section-2-online-and-digital-news/
- PEW RESEARCH CENTER FOR THE PEOPLE AND THE PRESS. (2012, September 27). Section 2: Online and digital news. Retrieved March 30, 2013, from <http://www.people-press.org/2012/09/27/section-2-online-and-digital-news-2/>
- PEW RESEARCH CENTER FOR THE PEOPLE & THE PRESS. (2006, July 30). Online papers modestly boost newspaper readership: Maturing Internet news audience broader than deep. Retrieved from <http://www.people-press.org/2006/07/30/section-1-watching-reading-and-listening-to-the-news-2/>

REFERENCES

PEW RESEARCH CENTER FOR THE PEOPLE & THE PRESS. (2010, September 12). Americans spending more time following the news. Retrieved October 15, 2012, from <http://www.people-press.org/2010/09/12/americans-spending-more-time-following-the-news/>

PEW RESEARCH CENTER'S JOURNALISM PROJECT. (2014a). Top 5 U.S. newspapers with paid smartphone/mobile editions. Retrieved August 21, 2014, from <http://www.journalism.org/media-indicators/top-5-u-s-newspapers-with-paid-smartphonemobile-editions/>

PEW RESEARCH CENTER'S JOURNALISM PROJECT. (2014b). Top 5 U.S. newspapers with paid tablet editions. Retrieved August 21, 2014, from <http://www.journalism.org/media-indicators/top-5-u-s-newspapers-with-paid-tablet-editions/>

PEW RESEARCH CENTER'S JOURNALISM PROJECT. (2014c, March 26). Key indicators in media and news. Retrieved August 20, 2014, from <http://www.journalism.org/2014/03/26/state-of-the-news-media-2014-key-indicators-in-media-and-news/>

PEW RESEARCH CENTER'S PROJECT FOR EXCELLENCE IN JOURNALISM. (2012, December 11). News consumption on mobile devices. Retrieved December 20, 2013, from <http://www.journalism.org/2012/12/11/news-consumption-mobile-devices/>

PICARD, R. G. (2003). Cash cows or entrecôte: Publishing companies and disruptive technologies. *Trends in Communication*, 11(2), 127–136.

PICARD, R. G. (2005). The nature of media product portfolios. In R. G. Picard (Ed.), *Media product portfolios: Issues in management of multiple products and services* (pp. 1–22). Hoboken: Routledge.

PICARD, R. G. (2008). News consumption and the business of journalism. In *2008: New Models for News* (pp. 112–118). The 2008 Breaux Symposium. Retrieved from <http://uiswcmsweb.prod.lsu.edu/manship/ReillyCenter/JohnBreauxSymposium/PreviousBreauxSymposia/item16005.html>

PICARD, R. G. (2009a). Blogs, Tweets, social media, and the news business. Retrieved May 30, 2011, from <http://www.nieman.harvard.edu/reportsitem.aspx?id=101884>

PICARD, R. G. (2009b, May 19). Why journalists deserve low pay. *Christian Science Monitor*. Retrieved from <http://www.csmonitor.com/Commentary/Opinion/2009/0519/p09s02-coop.html>

PICARD, R. G., & BRODY, J. H. (1997). *The newspaper publishing industry*. Boston: Allyn & Bacon.

PLASSMANN, H., O'DOHERTY, J., SHIV, B., & RANGEL, A. (2008). Marketing actions can modulate neural representations of experienced pleasantness. *Proceedings of the National Academy of Sciences*, 105(3), 1050–1054.

POINDEXTER, P. M. (2012). *Millennials, news, and social media: Is news engagement a thing of the past?*. Peter Lang Publishing.

REFERENCES

- PRENSKY, M. (2001). Digital natives, digital immigrants part I. *On the Horizon*, 9(5), 1–6. doi:10.1108/10748120110424816
- PRIOR, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. New York: Cambridge Univ Pr.
- PROJECT FOR EXCELLENCE IN JOURNALISM. (2006, October 12). Papers hope to sell print + online readers to advertisers. Retrieved October 30, 2008, from <http://www.journalism.org/node/2370>
- PROJECT FOR EXCELLENCE IN JOURNALISM, & EDMONDS, R. (2006). Economics. Retrieved March 21, 2007, from <http://stateofthedia.org/2006/newspapers-intro/economics/>
- RABAINO, L. M. (2010, November 22). Four major sins of news design. Retrieved August 26, 2014, from http://www.mediabistro.com/10000words/four-fixable-sins-of-news-design_b1741
- READERSHIP INSTITUTE. (2008). *Local daily newspaper Web sites: Usage and experiences*. Retrieved from <http://www.readership.org/consumers/rbs/data/websites2008.pdf>
- ROBERTS, J. J. (2013, February 7). New York Times posts ho-hum numbers, slow digital growth. Retrieved May 20, 2013, from <http://paidcontent.org/2013/02/07/not-good-enough-new-york-times-posts-ho-hum-numbers-slow-digital-growth/>
- RODGERS, R., HALLOCK, S., GENNARIA, M., & WEI, F. (2004). Two papers in joint operating agreement publish meaningful editorial diversity. *Newspaper Research Journal*, 25(4), 104–109.
- ROODHOUSE, E., DELLI CARPINI, M. X., LEE, A. M., & VENGER, O. (2009). *Coverage of the decline in newspaper readership and television national news: A preliminary analysis*. Annenberg School for Communication, University of Pennsylvania. Retrieved from http://www.asc.upenn.edu/news/2009/Newspaper_TV_Study.pdf
- ROSENSTIEL, T., & MITCHELL, A. (2004). The impact of investing in newsroom resources. *Newspaper Research Journal*, 25(1), 84–97.
- ROSENSTIEL, T., & MITCHELL, A. (2011). Overview. Retrieved April 10, 2011, from <http://stateofthedia.org/2011/overview-2/>
- ROSENWALD, M. (2014, April 6). Serious reading takes a hit from online scanning and skimming, researchers say. Retrieved August 30, 2014, from http://www.washingtonpost.com/local/serious-reading-takes-a-hit-from-online-scanning-and-skimming-researchers-say/2014/04/06/088028d2-b5d2-11e3-b899-20667de76985_story.html
- ROTELLA, C. (2013, September 12). No child left untableted. Retrieved August 31, 2014, from <http://www.nytimes.com/2013/09/15/magazine/no-child-left-untableted.html?pagewanted=all>

REFERENCES

RUDD, M. J., & RUDD, J. (1986). The impact of the information explosion on library users: Overload or opportunity? *Journal of Academic Librarianship*, 12(5), 304.

RUE, J. (2010, May 4). Lean-forward vs. lean-back media. Retrieved February 9, 2014, from <http://jeremyrue.com/2010/05/04/lean-forward-vs-lean-back-media/>

SABA, J. (2006, November 20). Newspapers, Yahoo reveal more about new partnership. Retrieved April 2, 2013, from <http://www.editorandpublisher.com/Article/Newspapers-Yahoo-Reveal-More-About-New-Partnership>

SANTANA, A. D., LIVINGSTONE, R. M., & CHO, Y. Y. (2013). Print readers recall more than do online readers. *Newspaper Research Journal*, 34(2), 78–92.

SASSEEN, J., OLMSTEAD, K., & MITCHELL, A. (2013). Digital: As mobile grows rapidly, the pressures on news intensify. Retrieved August 19, 2014, from <http://stateofthedia.org/2013/digital-as-mobile-grows-rapidly-the-pressure-on-news-intensify/#fnref-12962-4>

SCHIERHORN, C., WEARDEN, S. T., SCHIERHORN, A. B., TABAR, P. S., & ANDREWS, S. C. (1999). What digital formats do consumers prefer? *Newspaper Research Journal*, 20(3), 2–19.

SCHULZE, J. (2009, April 6). Google dubbed internet parasite by WSJ editor. Retrieved April 2, 2013, from <http://www.theaustralian.com.au/media/google-dubbed-internet-parasite/story-e6frg996-1225696931547>

SEAMANS, R., & ZHU, F. (2013). *Responses to entry in multi-sided markets: The impact of Craigslist on local newspapers* (SSRN Scholarly Paper No. ID 1694622). Rochester, NY: Social Science Research Network. Retrieved from <http://papers.ssrn.com/abstract=1694622>

SEIZE THE FUTURE: FREQUENTLY ASKED QUESTIONS. (2011). Retrieved October 8, 2011, from <http://www.philly.com/ad/campaign/129572598.html>

SHIV, B., CARMON, Z., & ARIELY, D. (2005). Placebo effects of marketing actions: Consumers may get what they pay for. *Journal of Marketing Research*, 42(4), 383–393.

SIFRY, D. (2007, July 30). The state of the live Web, April 2007. Retrieved from <http://technorati.com/weblog/2007/04/328.html>

SILVERTHORNE, S. (2002, January 28). Read all about it! Newspapers lose Web war. Retrieved from <http://hbswk.hbs.edu/item/2738.html>

SMILLIE, D. (2009, April 3). Murdoch wants a Google rebellion. Retrieved December 7, 2012, from <http://www.forbes.com/2009/04/03/ruPERT-murdoch-google-business-media-murdoch.html>

SOLOSKI, J. (2013). Collapse of the US newspaper industry: Goodwill, leverage and bankruptcy. *Journalism*, 14(3), 309–329. doi:10.1177/1464884912472016

REFERENCES

- STATE OF THE MEDIA. (2013). Key findings: Digital developments. Retrieved December 25, 2013, from <http://stateofthedia.org/2013/overview-5/key-findings/>
- STEINBOCK, D. (2000). Building dynamic capabilities: The Wall Street Journal Interactive Edition: A successful online subscription model (1993–2000). *International Journal on Media Management*, 2(3), 178–194.
- STEMPEL, G. H., & HARGROVE, T. (1996). Mass media audiences in a changing media environment. *Journalism & Mass Communication Quarterly*, 73(3), 549–58.
- STEMPEL, G. H., HARGROVE, T., & BERNT, J. P. (2000). Relation of growth of use of the Internet to changes in media use from 1995 to 1999. *Journalism & Mass Communication Quarterly*, 77(1), 71–79.
- SULLIVAN, L. (2013, March 19). Banner blindness: 60% can't remember the last display ad they saw. Retrieved August 17, 2014, from <http://www.mediapost.com/publications/article/196071/banner-blindness-60-cant-remember-the-last-disp.html>
- SULZBERGER, A. O. (2011, March 18). A letter to our readers about digital subscriptions. *New York Times*. Retrieved from <http://www.nytimes.com/2011/03/18/opinion/118times.html>
- SZALAI, G. (2009, June 24). Publishers make their case for paid-content model. Retrieved April 2, 2013, from <http://www.editorandpublisher.com/Archive/Publishers-Make-Their-Case-for-Paid-Content-Model>
- TAM, D. (2012, August 22). Facebook processes more than 500 TB of data daily. Retrieved November 24, 2013, from http://news.cnet.com/8301-1023_3-57498531-93/facebook-processes-more-than-500-tb-of-data-daily/
- TELLIS, G. J. (2006). Disruptive technology or visionary leadership? *Journal of Product Innovation Management*, 23(1), 34–38.
- TENNANT, J. I. (2011, November 4). Dallas Morning News less reliant on ad revenue, offering hope for the future of newspapers, publisher tells academics. Retrieved September 29, 2013, from <https://knightcenter.utexas.edu/blog/dallas-morning-news-less-reliant-advertising-revenue-offering-hope-future-newspapers-publisher->
- TENNANT, J. I. (2013). *Free newspapers in the United States: Alive and kicking* (Doctoral dissertation). The University of Texas at Austin, Austin, Texas.
- TENNANT, J. I., & CHYI, H. I. (2014). Reducing publication decreases U.S. college newspaper revenue. *Newspaper Research Journal*, 35(4), 98–112.
- TEWKSBURY, D. (2003). What do Americans really want to know? Tracking the behavior of news readers on the Internet. *Journal of Communication*, 53(4), 694–710. doi:10.1111/j.1460-2466.2003.tb02918.x

REFERENCES

TEWKSBURY, D., & ALTHAUS, S. L. (2000). Differences in knowledge acquisition among readers of the paper and online versions of a national newspaper. *Journalism and Mass Communication Quarterly*, 77, 457–479.

THE BIVINGS GROUP. (2009, December 17). The use of Twitter by America's newspapers. Retrieved August 22, 2014, from <http://blog.thebrickfactory.com/2009/12/the-use-of-twitter-by-americas-newspapers/>

THE ECONOMIST. (2006). The future of newspapers: Who killed the newspaper? Retrieved from http://www.economist.com/opinion/displaystory.cfm?story_id=7830218

THE ECONOMIST. (2013, March 30). You'll never work at home: Yahoo buys a teenager's start-up. Retrieved August 31, 2014, from <http://www.economist.com/news/business/21574497-yahoo-buys-teenagers-start-up-youll-never-work-home>

THE NEWSPAPER CONSORTIUM. (2011). Members. Retrieved April 15, 2011, from <http://www.npconsortium.com/members.php>

THE NEW YORK TIMES COMPANY. (2014a, April 24). The New York Times Company reports 2014 first-quarter results. Retrieved August 19, 2014, from <http://investors.nytc.com/investors/investor-news/investor-news-details/2014/The-New-York-Times-Company-Reports-2014-First-Quarter-Results/default.aspx>

THE NEW YORK TIMES COMPANY. (2014b, May 1). The New York Times announces solid circulation gains. Retrieved August 19, 2014, from <http://investors.nytc.com/press/press-releases/press-release-details/2014/The-New-York-Times-Announces-Solid-Circulation-Gains/default.aspx>

THE WEEK. (2014). Circulation. Retrieved August 24, 2014, from <http://newads.theweek.com/circulation/>

THOMPSON, D. (2012, December 11). How do Millennials like to read the news? Very much like their grandparents. Retrieved December 20, 2013, from <http://www.theatlantic.com/business/archive/2012/12/how-do-millennials-like-to-read-the-news-very-much-like-their-grandparents/266126/>

THURMAN, N. (2014). Newspaper consumption in the digital age: Measuring multi-channel audience attention and brand popularity. *Digital Journalism*, 2(2), 156–178. doi:10.1080/0/21670811.2013.818365

THURMAN, N., & MYLLYLAHTI, M. (2009). Taking the paper out of news. *Journalism Studies*, 10(1), 1–18.

TWITTER. (2013). About Twitter, Inc. Retrieved November 25, 2013, from <https://about.twitter.com/company>

VARIAN, H. R. (2013, September 26). Hal Varian: The economics of the newspaper business. Retrieved September 29, 2013, from <http://www.journalismfestival.com/news/hal-varian-on-the-economics-of-the-newspaper-business/>

REFERENCES

VARIAN, H. R., & LYMAN, P. (2003, October 27). How much information? 2003. Retrieved from <http://www2.sims.berkeley.edu/research/projects/how-much-info-2003/execsum.htm>

WEBMD. (N.D.). COMPUTER VISION SYNDROME. RETRIEVED FEBRUARY 9, 2014, from <http://www.webmd.com/eye-health/computer-vision-syndrome>

WILL, C. (2012, March 15). Engagement styles: Beyond “lean forward” and “lean back.” Retrieved February 9, 2014, from <http://johnnyholland.org/2012/03/engagement-styles-beyond-lean-forward-and-lean-back/>

WINDSOR, T. (2009, February 10). Will paid content work? Two cautionary tales from 2004. Retrieved September 18, 2011, from <http://www.niemanlab.org/2009/02/will-paid-content-work-two-cautionary-theses-from-2004/>

YAROS, R. A. (2008, winter). Digital natives: Following their lead on a path to a new journalism. Retrieved March 22, 2012, from <http://www.nieman.harvard.edu/reportsitem.aspx?id=100671>

Media Markets Monographs Series

Issues Published

1. NIETO, Alfonso (2000), *Time and the Information Market: The Case of Spain*.
2. ARRESE, Ángel (2001), *Economic and Financial Press: From the Beginnings to the First Oil Crisis*.
3. SÁNCHEZ-TABERNERO, Alfonso & Miguel CARVAJAL (2002), *Media Concentration in the European Market. New Trends and Challenges*.
4. HERRERO, Mónica (2003), *Programming and Direct Viewer Payment For Television*.
5. MEDINA, Mercedes (2004), *European Television Production. Pluralism and Concentration*.
6. BOGART, Leo (2005), *American Newspapers. How They Have Changed and How They Must Keep Changing*.
7. PÉREZ-LATRE, Francisco Javier (2006), *Issues on Media and Entertainment*.
8. PARDO, Alejandro (2007), *The Europe-Hollywood Coopetition: Cooperation and Competition in the Global Film Industry*.
9. VAN WEEZEL, Aldo (2008), *Cooperate Entrepreneurship in the Newspaper Industry*.

10. ARTERO, Juan P. (2009), *Corporate Governance and Risk Identification in Global Media Companies*.
11. ALBARRAN, Alan B. (2010), *The Transformation of the Media and Communication Industries*.
12. GERSHON, Richard (2011), *Intelligent Networks and International Business Communication. A Systems Theory Interpretation*.
13. BENAVIDES, Cristóbal (2012), *Innovation and Leadership in the Media Industry*.
14. CHYI, H. Iris (2013), *Trial and Error: U.S. Newspapers' Digital Struggles toward Inferiority*.

Editors

Alfonso Sánchez-Tabernero, Mercedes Medina, Mónica Herrero,
Cristina Etayo, Juan Pablo Artero.

Contact Information

For further information, orders or inquiries, please contact:

Department of Media Management
School of Communication
University of Navarra
31080 Pamplona (Spain)

Phone: + 34 948 425 655

Fax: + 34 948 425 636

E-mail: mmartinez@unav.es

www.unav.edu/departamento/empinf/formulario1

