Use of Online Newspaper Sites Lags Behind Print Editions

by Hsiang Iris Chyi and Seth C. Lewis

Analysis of newspaper market research data found that the newspaper’s print edition reaches far more local readers than does its online counterpart across each of the 68 metro dailies examined.

With 1,422 daily newspapers circulated in the United States, only a handful are newspapers with a national orientation and nationwide distribution in print. The vast majority of newspapers are local papers, serving relatively small geographic markets. Therefore, it is fair to say that the U.S. newspaper industry is characterized by localism. In these localized contexts, most daily newspapers control substantial market share—indeed, many are local monopolies as the only newspaper in town. Even in larger media markets, such as New York and Los Angeles, the number of direct competitors is limited.

Thus, most U.S. newspapers exert substantial market power within narrowly defined local markets. Yet, relatively little research has examined the market performance of online newspapers in local terms, failing to account adequately for crucial differences in the competitive landscape in the virtual and print domains. Given that most newspapers publish similar content in both online and print formats, a newspaper’s Web site competes with its well-established print counterpart for reader attention in the local market—thus, it is engaged in inter-media competition. In addition, newspaper sites also face intra-media competition because local TV sites, national newspaper and TV sites and news portals such as Yahoo! News are just one click away. As newspapers shift the nature of their operations and their offerings to adapt their print enterprise...
to the Web market, it is essential to examine how online newspapers compete for the attention of online news audiences in their local markets.

To delineate a realistic picture of this competitive environment online for local newspapers, this study examines U.S. newspapers’ online performance in multiple local markets. Through an analysis of two sources of secondary data, we consider 68 major online newspapers’ performance in both inter- and intra-media competition contexts—i.e., how they compete with their print counterparts and other Web sites for the attention of local Internet users.

**Literature Review**

The United States is one of the largest media markets in the world, yet few of its print newspapers are circulated nationwide. Among the national newspapers, the largest one—USA Today, with a circulation of 2.3 million—ranks only 13th worldwide and accounts for less than 5 percent of total paid circulation in the U.S. Since most U.S. newspapers are locally based, circulation levels tend to be low; as of 2005, the average Sunday circulation was 60,41 and the average weekday circulation only 36,739. Geographically, most U.S. newspapers operate in narrowly defined markets—e.g., an average U.S. daily newspaper serves about 2,972 square miles or an area slightly larger than Delaware.

Despite the relatively low circulation figures and relatively small geographic market, U.S. newspapers enjoy monopolistic power in their local markets. In recent years, the number of U.S. cities with completely separate, competing newspapers has been declining—from 47 in 1986 to 20 in 2000, with additional contraction since, typified perhaps by the sudden shutdown of the Denver Rocky Mountain News and the Seattle Post-Intelligencer in early 2009. In other words, most daily newspapers operate as local monopolies in single-newspaper cities, which has raised concerns about how competition, or the lack of it, would influence the quality of newspapers, the diversity of viewpoints on public affairs, the objectivity of news coverage and the responsiveness to the interests of the public. On the business side, the number of direct competitors in local newspaper markets is so limited that “the market shares controlled by metro dailies are envied by marketers of other products.”

In the information market, most U.S. newspapers enjoy monopolistic power in narrowly defined geographic markets. Limited competition exists among newspapers at different geographic levels. Rosse’s “umbrella competition” model depicted intercity competition among print newspapers in a four-layer hierarchical structure: metropolitan dailies, satellite city dailies, suburban dailies and weeklies. Newspapers may compete within and across layers, but the metro daily covers the entire geographic market while newspapers at different levels have their own niche. In other words, product substitutability is limited.

In the advertising market, empirical research has found no evidence of competition between daily and weekly newspapers or between daily newspapers and other national media such as daytime network TV, evening
network TV, spot TV, magazines, newspaper supplements, network radio, spot radio and outdoor advertising. Overall, newspapers rely heavily on local advertisers, with 85 percent of advertising revenue coming from local advertisers.

Against this backdrop, with so much market power and so limited competition in the local market for so long, most newspapers began their venture into the online market in the mid-1990s.

Research Questions

Well more than a decade after most newspapers set up online editions, little research has systematically evaluated online newspapers’ performance in their local markets. One methodological issue is that the large number of geographically dispersed local markets makes it difficult to closely examine each individual market, which can be tedious and time-consuming. As a result, scholarly research tends to concentrate on national trends, with less attention given to local markets where the vast majority of news production and consumption take place. This study attempts to address that gap by providing a comprehensive understanding of online newspapers’ performance in multiple local markets, beginning with the following research question:

RQ1:
What is the typical online penetration of a U.S. daily newspaper in its local market, and what factors are related to that penetration?

Online newspapers do not exist in a vacuum. In the local market, they are engaged in both inter- and intra-media competition. Inter-media competition refers to the relationship between a newspaper’s online and print operations, and intra-media competition involves the relationship between a newspaper site and other news sites (portal sites, national news sites, etc.). The following analysis examines online newspapers’ performance in both aspects.

In the local market, online newspapers co-exist with their print counterparts. The newspaper’s goal is for the online product to extend the reach of the newspaper’s brands. In 2007, the industry adopted the “combined online and print audience” metric, promoting the concept of an “integrated newspaper audience.” But the market relationship between online and print newspapers is intriguing. As most online newspapers publish content produced by their print counterparts, publishers began to fear that offering online news for free would erode the paying print readership. Nevertheless, after various paid-content experiments over the years, the plausible cannibalization effect has not prevented most newspapers from offering free content online. In addition, previous research found that print penetration did not fall among online readers, suggesting that many readers of the free online edition still also read the fee-based print edition.
To examine how local users respond to the same newspaper’s online and print editions, it is important to compare online and print readerships in multiple local markets systematically. But academic studies often have measured print and online newspaper use in general terms (e.g., referring to newspapers without specifying which newspapers, or to online news as opposed to specific online news sites), so a wide range of media products have been lumped together in most analyses, making microanalysis difficult. Some researchers have taken a more specific approach by matching a newspaper’s online and print readership data, which reflects more realistically a typical newspaper reader’s choices between the online and print formats. Along this line, this study takes one step further by examining the relationship between a newspaper’s online and print readership in multiple markets. Therefore, this study addresses the following question:

RQ2:
In the local market, is the size of the local newspaper’s online readership comparable to that of its print readership?

Offline, a print newspaper may be a local monopoly. Online, it is a completely different story. As the Internet’s boundary-transcending capacity enables newspapers to reach readers outside their local market, it also brings in other online news services to local users. Therefore, any local newspaper Web site must compete with other news sites for audience attention and advertising revenue. A typical metro newspaper provides not only local news but news at regional, national and international levels. Therefore, a local newspaper site’s online competitors include local TV sites, national newspaper and TV sites, national news portals (e.g., Yahoo! News or AOL News) and even international news outlets because of presumably substitutable product offerings and limited user time and attention. For U.S. newspapers that have almost always been locally focused, the Internet has created a highly competitive landscape. According to a Pew Research Center survey, among regular online news users, the most frequently visited news sites are MSNBC (31 percent), Yahoo! (23 percent), CNN.com (23 percent), Google (9 percent), AOL (8 percent) and FoxNews.com (8 percent)—none of which is affiliated with a newspaper. The most popular newspaper sites are NYTimes.com and USAToday.com, with each reaching 5 percent of regular Internet users. However, these are national trends. In individual local markets, are local newspaper sites facing similar challenges posed by portals and non-newspaper news sites? To examine online news competition in the local market, this study addresses the following research questions:

RQ3:
Based on penetration, what are the leading news and information sites in local markets, and where do local newspaper sites rank among them?
RQ4:

To what extent do local newspaper sites and competing news sites differ on various performance metrics (i.e., average minutes per visitor, average page views per visitor, average minutes per page and consumer buying power)?

Methods

Secondary Data Analysis

To examine online newspapers’ performance in inter- and intra-media terms, this study draws on two data sources:

- Inter-media competition is measured via an analysis of newspaper readership data (for online and print editions) gathered by Scarborough Research, a leading provider of consumer information in local-market contexts, in September 2007. Scarborough Research collected newspaper readership data through random-sample telephone interviews followed by a self-administered questionnaire. Such data can be retrieved from the Audience-FAX database, a collaborative project with the Audit Bureau of Circulations, the Newspaper Association of America and Scarborough Research.

- Intra-media competition is measured via an analysis of Internet audience metrics data collected by comScore Media Metrix in 100 local markets in September 2006. An Internet market research firm, comScore Media Metrix, operates national panels to collect Web site usage data by installing tracking software on their panelists’ computers. In recent years, comScore Media Metrix has started monitoring Internet usage in individual local markets. Each local-market data set contains usage data of the most popular news Web sites (i.e., newspaper sites, TV sites and news portals) in one of the Top 100 U.S. media markets.

Sample

While a print newspaper may enjoy monopoly-like power in its local market, clearly that’s not the case for its online edition, which must go up against any number of potential competitors for the attention of local news consumers.

With more than 1,400 daily newspapers operating in the United States, this
Study focuses on major newspapers in major markets. So the sampling process begins with a list of U.S. newspapers with circulation of 100,000 or above. Because the focus of this study is local daily newspapers, national and non-English papers were excluded from the analysis. In addition, some newspapers’ online usage was not reported by comScore Media Metrix in its September 2006 local-market reports, so there is not sufficient information to evaluate their performance. As a result, the final sample includes 68 local newspapers in 58 of the Top 100 media markets. This sample, although not representative of the overall structure of the U.S. newspaper industry, includes most of the largest local newspapers, based on their circulation, and operating in most of the major media markets, based on their population.

**Key Variables and Data Processing**

Online penetration is calculated by dividing the number of monthly unique visitors—unduplicated individuals who visited a Web site within a month—by the estimated number of Internet users in the local market. It represents the percentage of Internet users who visit a particular Web site during the month. To address RQ1 (regarding online penetration), site-reach data for each of the 68 newspapers in the 100 local-market dataset compiled by comScore Media Metrix were identified.

Print readership is defined as the estimated number of readers who read a newspaper within the DMA (Designated Market Area) during a 7-day period. Online readership is measured by the estimated number of readers the Web site reached within the DMA (Designated Market Area) during a 7-day period. To address RQ2 (online and print readerships), each newspaper’s online and print readership data were compared.

Site ranking is based on online penetration in the local market. To address RQ3 (leading sites in local markets) and RQ4 (differences between newspaper sites and other news sites across various audience metrics), comScore Media Metrix’s usage reports of each of the Top 100 local markets were analyzed and the Web sites’ audience metrics compared.

**Results**

The sample of 68 newspapers includes most of the major local newspapers in the United States. These papers’ total circulation of 23,764,833 accounted for 45 percent of total U.S. newspaper circulation in 2006. Individual papers’ circulation ranged from 101,277 to 1,231,318 (mean = 354,699; S.D. = 230,961). About 13 percent of the newspapers had a circulation between 100,001 and 150,000; 15 percent had between 150,001 and 200,000; 24 percent had from 200,001 to 300,000; 28 percent had between 300,001 and 500,000; and 19 percent had a circulation of more than 500,000.

The number of monthly unique visitors (September 2006) for the 67 newspaper sites ranged from 39,668 to 925,362 (mean = 268,528; S.D. = 210,087).
About 16 percent of the online newspapers had less than 100,000 unique visitors during the month. About 30 percent had between 100,000 to 200,000; 27 percent had between 200,000 to 300,000; 8 percent had between 300,000 to 400,000; 8 percent had between 400,000 to 500,000, and 12 percent had 500,000 or more unique visitors during the month.

**RQ1: What is the typical online penetration of a U.S. daily newspaper in its local market, and what factors are related to that penetration?**

The first research question asked about newspapers’ online penetration in local markets. The estimated number of unique visitors was converted to percent reach according to the size of the Internet population in each market. Based on comScore Media Metrix’s panel data, the 67 newspapers’ online penetration during that month (September 2006) ranged from 1 percent to 30 percent. [See Table 1] The following sites managed to reach more than 25 percent of local Internet users: AZCentral.com (Phoenix), SignonSanDiego sites, Austin (Texas) American-Statesman sites, Projo.com (Providence-New Bedford, R.I.), and WashingtonPost.com. On average, local newspaper sites reached only 15 percent of local Internet users during the month.

As for what factors are related to online penetration, correlation analysis showed that online penetration (i.e., site reach) is positively related to site performance metrics such as total minutes (Pearson’s r = .357, p < .01), total page views (r = .526, p < .001), average usage days per visitor (r = .462, p < .001), and average pages per visitor (r = .302, p < .05). There was no significant relationship between online penetration and print circulation. [See Table 2] In other words, the online editions of larger newspapers did not necessarily reach higher percentages of Internet users in their local markets, when compared to smaller papers in their local domains.

**RQ2: In the local market, is the size of the local newspaper’s online readership comparable to that of its print readership?**

The second research question asked whether the size of the local newspaper’s online readership is comparable to that of its print readership in the local market. Based on the seven-day readership data collected by Scarborough Research through telephone surveys [See Table 3], none of these newspapers’ online readership was larger than its print readership in the local market (N =
Analyses using ratio statistics showed that the size of the online readership in the local market was on average 23 percent of the print readership—with the ratio ranging from 9 percent to 41 percent. This suggests that despite free online offerings, newspapers’ online editions reached far fewer readers than did their print counterparts in the local market.  

RQ3: Based on penetration, what are the leading news and information sites in local markets, and where do local newspaper sites rank among them?

The third research question sought to identify the leading news and information sites in local markets, and the ranking of online newspaper sites among them. Based on comScore Media Metrix’s 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).

Among the 67 newspaper sites, only 13 percent ranked No. 1 in their local market: AZCentral.com (Phoenix), Kentucky.com (Lexington), Projo.com (Providence-New Bedford, R.I.), the Atlanta Journal-Constitution sites, Boston.com sites, Buffalo.com sites, KnoxNews.com (Knoxville, Tenn.), Syracuse.com sites and WashingtonPost.com. In most cases, local newspaper sites were not the leading news source for the local online news audience. [See Table 4] These findings suggest that while local newspapers maintain monopoly-like influence over the consumption of print news in their local markets, in the online environment their market power is gravely diminished.

RQ4: To what extent do local newspaper sites and competing news sites differ on various performance metrics (i.e., average minutes per visitor, average page views per visitor, average minutes per page and consumer buying power)?
The fourth research question asked how local newspaper sites and competing news sites differed on various performance metrics: average minutes per visitor, average page views per visitor, average minutes per page, and consumer buying power. [See Table 5] Compared with Yahoo News!, MSNBC and AOL News, local newspaper sites’ performance across the three average site-reach metrics was not particularly strong nor weak. Visitors to these sites showed above-average online buying power. In particular, newspaper site users spent 26 percent more online than general Internet users.

Table 3
Print and Online Readership

<table>
<thead>
<tr>
<th>Site</th>
<th>Print</th>
<th>Online</th>
<th>Site</th>
<th>Print</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles Times</td>
<td>4,458,809</td>
<td>725,049</td>
<td>Arkansas Democrat-Gazette</td>
<td>654,148</td>
<td>56,804</td>
</tr>
<tr>
<td>The Washington Post</td>
<td>2,796,936</td>
<td>967,236</td>
<td>The Charlotte Observer</td>
<td>930,030</td>
<td>205,816</td>
</tr>
<tr>
<td>Chicago Tribune</td>
<td>3,279,351</td>
<td>729,752</td>
<td>Hartford Courant</td>
<td>832,790</td>
<td>215,010</td>
</tr>
<tr>
<td>Denver Post/Rocky M’t. News</td>
<td>1,579,339</td>
<td>450,334</td>
<td>Des Moines Register</td>
<td>577,746</td>
<td>90,351</td>
</tr>
<tr>
<td>Houston Chronicle</td>
<td>2,126,089</td>
<td>402,969</td>
<td>Tennesseean</td>
<td>908,979</td>
<td>140,652</td>
</tr>
<tr>
<td>The Detroit News/Free Press</td>
<td>2,091,356</td>
<td>367,275</td>
<td>Austin American-Statesman</td>
<td>719,463</td>
<td>250,596</td>
</tr>
<tr>
<td>Dallas Morning News</td>
<td>1,955,915</td>
<td>391,438</td>
<td>Democrat &amp; Chronicle</td>
<td>630,873</td>
<td>109,014</td>
</tr>
<tr>
<td>Minneapolis Star Tribune</td>
<td>1,769,835</td>
<td>299,602</td>
<td>Providence Journal</td>
<td>732,164</td>
<td>176,711</td>
</tr>
<tr>
<td>Boston Globe</td>
<td>1,902,510</td>
<td>770,817</td>
<td>Memphis Commercial Appeal</td>
<td>726,155</td>
<td>108,087</td>
</tr>
<tr>
<td>Atlanta Journal Constitution</td>
<td>2,097,500</td>
<td>780,251</td>
<td>Raleigh News &amp; Observer</td>
<td>729,025</td>
<td>192,261</td>
</tr>
<tr>
<td>The Arizona Republic</td>
<td>1,771,342</td>
<td>615,833</td>
<td>The Palm Beach Post</td>
<td>712,336</td>
<td>160,308</td>
</tr>
<tr>
<td>San Francisco Chronicle</td>
<td>1,661,795</td>
<td>536,732</td>
<td>The Fresno Bee</td>
<td>642,278</td>
<td>70,931</td>
</tr>
<tr>
<td>The Plain Dealer</td>
<td>1,400,833</td>
<td>249,582</td>
<td>Birmingham News</td>
<td>623,447</td>
<td>139,260</td>
</tr>
<tr>
<td>Seattle Times/Post-Intelligencer</td>
<td>1,521,249</td>
<td>495,278</td>
<td>Arizona Daily Star</td>
<td>500,601</td>
<td>121,011</td>
</tr>
<tr>
<td>St. Louis Post-Dispatch</td>
<td>1,568,502</td>
<td>308,336</td>
<td>Dayton Daily News</td>
<td>519,920</td>
<td>111,308</td>
</tr>
<tr>
<td>St. Petersburg Times</td>
<td>1,112,592</td>
<td>159,100</td>
<td>The Honolulu Advertiser</td>
<td>607,517</td>
<td>107,294</td>
</tr>
<tr>
<td>The San Diego Union Tribune</td>
<td>1,224,983</td>
<td>309,689</td>
<td>The Knoxville News-Sentinel</td>
<td>557,612</td>
<td>85,409</td>
</tr>
<tr>
<td>Milwaukee Journal Sentinel</td>
<td>1,103,459</td>
<td>251,473</td>
<td>The Salt Lake Tribune/Deseret News</td>
<td>796,062</td>
<td>217,764</td>
</tr>
<tr>
<td>The Baltimore Sun</td>
<td>1,150,750</td>
<td>213,363</td>
<td>Patriot-News</td>
<td>453,943</td>
<td>72,331</td>
</tr>
<tr>
<td>The Miami Herald</td>
<td>1,498,914</td>
<td>272,213</td>
<td>Wichita Eagle</td>
<td>433,139</td>
<td>80,860</td>
</tr>
<tr>
<td>Portland Oregonian</td>
<td>1,219,302</td>
<td>234,320</td>
<td>Lexington Herald-Leader</td>
<td>516,081</td>
<td>90,038</td>
</tr>
<tr>
<td>Kansas City Star</td>
<td>1,054,357</td>
<td>227,789</td>
<td>The News Tribune</td>
<td>485,470</td>
<td>82,712</td>
</tr>
<tr>
<td>The Columbus Dispatch</td>
<td>1,032,156</td>
<td>160,600</td>
<td>Times Union</td>
<td>426,252</td>
<td>108,993</td>
</tr>
<tr>
<td>San Antonio Express-News</td>
<td>1,009,994</td>
<td>262,329</td>
<td>Greenville News</td>
<td>418,716</td>
<td>116,670</td>
</tr>
<tr>
<td>Orlando Sentinel</td>
<td>1,209,752</td>
<td>239,351</td>
<td>Washington Times</td>
<td>398,912</td>
<td>109,089</td>
</tr>
<tr>
<td>South Florida Sun-Sentinel</td>
<td>949,484</td>
<td>224,086</td>
<td>Note: Figures represent 7-day print/online readership within DMA, Scarborough Research.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Sacramento Bee</td>
<td>1,097,012</td>
<td>249,771</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fort Worth Star-Telegram</td>
<td>1,079,921</td>
<td>188,068</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Tampa Tribune &amp; Times</td>
<td>984,883</td>
<td>311,323</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4
Online Newspapers’ Rankings in Local Markets

<table>
<thead>
<tr>
<th>Site Ranking</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>13</td>
</tr>
<tr>
<td>No. 2</td>
<td>30</td>
</tr>
<tr>
<td>No. 3</td>
<td>15</td>
</tr>
<tr>
<td>No. 4</td>
<td>16</td>
</tr>
<tr>
<td>No. 5</td>
<td>9</td>
</tr>
<tr>
<td>No. 6-10</td>
<td>14</td>
</tr>
<tr>
<td>No. 11-21</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

(N) (67)

Cell entries are percentages of online newspapers that achieved a particular ranking in their local markets.
Source: comScore Media Metrix September 2006 data.
### Table 5
**Leading News Sites’ Performance Metrics**

<table>
<thead>
<tr>
<th></th>
<th>Average Minutes Per Visitor</th>
<th>Average Page Views Per Visitor</th>
<th>Average Minutes Per Page</th>
<th>Consumer Buying Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yahoo News!</td>
<td>27.6</td>
<td>27.0</td>
<td>1.00</td>
<td>123</td>
</tr>
<tr>
<td>MSNBC</td>
<td>39.7</td>
<td>21.3</td>
<td>1.72</td>
<td>122</td>
</tr>
<tr>
<td>AOL News</td>
<td>21.2</td>
<td>36.8</td>
<td>0.60</td>
<td>116</td>
</tr>
<tr>
<td>Local sites*</td>
<td>26.0</td>
<td>30.7</td>
<td>0.81</td>
<td>126</td>
</tr>
</tbody>
</table>

*Represents the 67 newspaper sites’ combined average. Source: comScore Media Metrix September 2006 data.

### Discussion

Much has been made of the crisis of U.S. newspapers in the early 21st century. Warnings about the industry’s impending demise often include calls for newspapers to more quickly and completely transition from being news-on-paper to becoming a truly online newspaper—reasoning, in essence, that newspapers would succeed in part if they only become more Web-oriented. Those views, however, carry certain assumptions about the market effectiveness of newspapers in the online environment; those assumptions ought to be measured based on current conditions. Yet, during this time of transition from print to online, relatively little attention has been paid to the competitive dynamics facing the online newspaper—particularly in local-market contexts, the primary domain of U.S. newspaper operations and influence. While a print newspaper may enjoy monopoly-like power in its local market, clearly that’s not the case for its online edition, which must go up against any number of potential competitors for the attention of local news consumers. Therefore, this study sought to evaluate the market performance of online newspapers vis-à-vis their print counterparts (i.e., inter-media competition) as well as major national news sites and portal sites within the online domain (i.e., intra-media competition).

Through an analysis of two sets of market-research data, this study found that major newspapers’ Web sites reached only 15 percent of local Internet users within a month. In terms of readership, the newspaper’s print edition reached far more local readers than its online counterpart, across each of the 68 metro dailies that we examined. Meanwhile, non-newspaper sites were the leading online news source in 89 of the Top 100 local markets. Local newspapers sites—or newspaper sites of any kind—trailed behind Yahoo! News, MSNBC and, to a lesser extent, AOL News as a source for online news among local users. Thus, in terms of market power, the online newspaper is disadvantaged both in inter-media and intra-media competition. This section will consider each aspect in turn.
First, it is important to note the extent to which the online newspaper struggles to match the reach—in terms of total readership in the local market—of its print counterpart. On average, the size of a local daily newspaper’s online readership in the local market is about a quarter of its print readership. Even though the U.S. Internet penetration rate of 73 percent means that some people do not have access to online news, the yawning gap between print and online readership deserves attention. In purely rational economic terms, the lack of online newspaper readership seems surprising: After all, the online edition is almost always free, the print edition requires a fee and there is substantial content-sharing between the two editions. To be sure, there are some plausible explanations to this penetration puzzle. For instance, the circulation of print newspapers is driven by home delivery (push media) as opposed to being specifically requested by the user (pull media) and the difference between online and offline reading experiences may differentiate actual engagement with the product. Moreover, recent research has found evidence that online news may be an “inferior good,” in the economics sense of the phrase—i.e., a convenient but less preferred alternative to the “normal good” of print news, just as fast food is an inferior good compared to steak. Ultimately, each of these facets call for greater research into the factors determining news(paper) readers’ media choices. Finally, in comparing print vs. online, this study found that print circulation is not significantly related to site reach. This suggests that larger newspapers appear to be no more effective at penetrating their local markets than smaller dailies, even though larger papers presumably have greater resources for developing a better Web presence. Indeed, in recent years some smaller newspapers, such as The Las Vegas Sun and The Lawrence Journal-World, have emerged as models of innovation and Web effectiveness compared to many larger metro papers. This calls for additional research on the connection (or lack thereof) between a newspaper’s resources and its reach among local audiences.

Secondly, with regard to intra-media competition, this study raises important questions about newspaper sites’ competitiveness in the online market. Why are online newspapers losing their local franchise on the Internet to services like Yahoo! News and MSNBC? Yahoo! News is a news portal with no particular local focus, yet it has become the leading online news site in 53 of the Top 100 U.S. markets. On the other hand, local newspaper sites, despite their long-term affiliation with the local market, do not seem to enjoy any advantage when competing with non-local players.

One may wonder whether online news readers are not as interested in local news as are print newspaper readers. Yet, in local markets, national newspaper sites are not more popular than are local newspaper sites. Prominent national newspaper sites such as USA Today.com and NYTimes.com broke into the Top 5 news-site ranking in only three local markets. Overall, each reached about 5 percent of Internet users at the national level. Taken together, it is clear that Yahoo! News, MSNBC and AOL News outperform newspaper sites in most local markets.
What might explain this phenomenon? First, it is obvious but nonetheless important to recognize that a local newspaper brings only one type of exclusive content to the Web market—its local news and information—and therefore should not be expected to compete with the breadth of news portals and aggregators. Thus, as a local newspaper’s core advantage becomes increasingly narrow in the online environment, the online newspaper becomes something of a niche site, even within its own local market. This raises a query of interest for the newspaper industry: If online newspapers are not equipped to compete with out-of-market sites on virtually all topics other than local information, how should newspapers handle non-local news on their Web sites? At present, most newspapers are “shoveling” or otherwise replicating their print edition (with its traditional sectioning of international, national and regional news, among other sections) on their Web presence, with insufficient thought to the relative value of purely localized news and information. Meanwhile, the success of Yahoo! News and others at capturing the largest share of news attention in local markets suggests something about their core advantage: the ability to be where their users are—placing headlines next to users’ e-mail and search results and otherwise creating a Web setting for incidental exposure to news content.

Overall, this study clearly documented that local newspaper sites, in their own franchise, do not perform as well when compared with out-of-the-market, non-newspaper players. Further research should explore how these competitive dynamics play out in the way online readers choose between newspaper and non-newspaper sites.

In the meantime, it’s worth noting that online newspapers also attain substantial usage from outside the print market, although the potential of this long-distance market segment remains underdeveloped. Technically, online newspapers can go beyond the local market boundaries defined by their print counterparts to reach both local and long-distance audiences, but most online newspapers still target audiences in the local market—the print newspaper’s franchise—for audience share and especially for advertising dollars. In 2004, local advertising accounted for 90 percent or more of newspapers’ Web site revenue.

Thus, in conclusion, as the Internet breaks down the geographic boundaries that previously defined the newspaper industry, issues of readership and revenue in comparative contexts—online-versus-print and local-versus-global—deserve greater scholarly attention. At a minimum, when the future of newspapers was considered, it is too simplistic to suggest that U.S. newspapers will be more competitive merely by becoming more attuned to the Web—or by dropping the print edition entirely. Rather, a more nuanced view is in order, recognizing the complex and changing dynamics at the inter-media and intra-media levels of market competition.
Limitations of the Study

This study analyzed market data collected by comScore Media Metrix and Scarborough Research. Three limitations warrant discussion. First, because the comScore data did not include most community newspapers’ online metrics, this study examined only larger newspapers with circulation of 100,000 or more, while the average Sunday circulation of a U.S. daily newspaper is only 60,471. Therefore, one should take the characteristics of this sample into consideration when interpreting the results. After all, large metro newspapers and small community newspapers are subject to different parameters when operating at different levels of the “local” context.

Second, the comScore data were collected in 2006 and the Scarborough data in 2007. As the online environment has evolved in the past three years, there might be a lag in terms of drawing conclusions about the nature of the online market today.

Finally, because of the discrepancies in the audience metrics data published by comScore and its major competitor, Nielsen/NetRatings, some have questioned the validity and reliability of panel-based audience metrics. There is probably no satisfactory answer to these concerns because different firms use different designs and there is no single, perfect method for measuring Internet activities. Yet, market research firms provide data that are otherwise unavailable and online marketing professionals use these data to assist with decision-making. Incorporating such data in analyses like ours may also help bridge the gap between academic and applied research in journalism studies.

Notes
1. Editor & Publisher, “Circulation of U.S. Daily Newspapers by Circulation Groups,” In Editor & Publisher International Year Book: Editor & Publisher, 2008.


24. Metro newspaper sites tend to consider “city guide” sites, major search engines’ local versions (such as Yahoo!), or other newspaper sites covering adjacent areas as their competitors. Smaller online newspapers report few competitors within their geographic market except for locally targeted tabloids that have Web sites. In the broadest sense, online newspapers compete with every medium (online and traditional) or even with every daily activity for people’s time. For details, see Hsiang Iris Chyi and George Sylvie, “Online Newspapers in the U.S.: Perceptions of Markets, Products, Revenue, and Competition,” International Journal on Media Management 2, no. 2 (2000): 13-21.


28. comScore Media Metrix reports data monthly on 101 U.S. local markets, representing 85% of the U.S. population and comprising 95% of online activity. For a summary of comScore Media Metrix’s methodology, visit <http://www.mymetrix.comscore.com> (2006).

29. Circulation is based on each paper’s highest circulation, typically the Sunday edition, during the week of March 31, 2006, reported by the Audit Bureau of Circulations.

30. Readership figures are usually higher than circulation because more than one person may read a newspaper.

31. “Online readership,” the total number of readers the Web site attracts within a defined market area, is different from “Web site usage,” which includes the total number of visitors to a site, regardless of the origination, see Audit Bureau of Circulations, “Audience-Fax: FAQs for Tier One Newspapers,” <http://www.accessabc.com/resources/n_audiencefaq.htm#11> (2008).

32. Newspaper Association of America, “Total Paid Circulation.”

33. Based on ABC’s FAS-FAX ending March 31, 2006, representing each paper’s highest circulation of the week, typically the Sunday edition.

34. Since The Philadelphia Inquirer and The Philadelphia Daily News share one Web site, their circulations are combined and therefore the sample size becomes 67 in the analysis.

35. Based on comScore Media Metrix September 2006 data.

36. It should be noted that Scarborough’s local surveys did not reach non-local readers.

37. The Buying Power Index (BPI) measures the total dollars spent online by the average member of a site’s audience, indexed to the total online dollars spent by the average Internet user. Visitors to a site with a BPI of 100 spend an average amount across the Web, while a site with a BPI of 200 draws visitors that spend twice as much online as the average Internet user. See comScore Media Metrix, “Newspaper Web Site Audiences Grow Faster Than Total Internet Populations in Largest U.S. Markets, Reports comScore Media Metrix,” <http://www.comscore.com/press/release.asp?press=81> (2002).


