
USE OF AND SATISFACTION WITH NEWSPAPER SITES IN THE LOCAL MARKET: EXPLORING DIFFERENCES BETWEEN HYBRID AND ONLINE-ONLY USERS

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This study explores U.S. newspapers' online readership in the local market by comparing (1) "hybrid" readers who access both the print and online versions and (2) online-only readers. Survey data gathered from twenty-eight newspaper sites show that hybrid readers outnumber online-only users by a 2-to-1 margin and use their local newspaper sites more actively. Regression analyses identify predictors of site satisfaction and user type. These findings provide new perspectives on the nature of multiplatform news consumption as readers weigh related goods of news and information.

When Americans get their news today, they often mix and meld media platforms, drawing on both new and traditional sources as they gather news and information.¹ This trend toward integrated media use raises questions about the product relationship between online and print versions of U.S. newspapers, which are offered at different prices and in different formats. The purpose of this study, then, is to explore how consumers engage their local daily newspaper in multiple formats. In particular, as newspapers expand their online reach and seek to market their combined total audience of print and online readers, we attempt to puzzle out distinctions in demographics, site use, and satisfaction between two types of online newspaper users: (1) "hybrid" readers who access both print and online versions; and (2) online-only readers.

The newspaper industry has been characterized by its "fuzzy" market structure² because newspapers serve at least three distinct markets—the *information* market, the *advertising* market, and the *intellec-*

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tual market—with the same product offering.³ This fuzziness, or ambiguity in the nature of media products and markets, has become more pronounced in the digital era, as new technologies have opened vastly more choices for media consumers,⁴ contributing to the vanishing audiences for U.S. newspapers.⁵ Moreover, as newer media tend to provide close substitutes for existing media products,⁶ it becomes increasingly difficult to detect and define how consumers substitute one media product for another.⁷

Meanwhile, despite the difficulty in parsing out product substitution in media use, newspapers have sought to emphasize their multiplatform reach—saying, in effect, that they reach most customers with the same product or service. In doing so, newspapers implicitly argue for market *simplification*, rather than acknowledging their market *fuzziness*. In 2007, the Audit Bureau of Circulations introduced the “combined online and print audience” metric,⁸ which allows newspapers to give the impression that their overall readership is growing without highlighting print-side deficiencies. Combining online and print readership may impress advertisers in the short term, but it does not address the long-term challenge of declining readership and revenues in the core print product. Moreover, the “total audience” concept is theoretically problematic because it assumes that each online user delivers the same value as a print reader, which is not the case. Analysts suggest that it takes several dozen online readers,⁹ or perhaps as many as 100,¹⁰ to substitute for—in terms of advertising revenue—the loss of a single reader of the hard-copy newspaper, despite growth in online advertising.¹¹ In addition, despite multiple gateways to a single media brand,¹² readers’ preferences for different platforms vary.¹³

To better understand the nature of newspaper readership at the local market level, this study (1) defines two distinctive groups of users who constitute the online newspaper readership in the local market; (2) compares the differences between hybrid users and online-only users in demographic characteristics and usage patterns; (3) examines how each group fares in utility, measured by user satisfaction; and (4) explores factors determining satisfaction and user group.

Online Newspaper Readership. In discussing the online readership of any newspaper, it is important to first distinguish between two types of readers—those who live in the local area served by the paper’s print edition, and those long-distance users who come to the site from afar.¹⁴ Only local users have access to their local newspaper both in print and online. Among local users, this study further distinguishes between two different types of readers: (1) the hybrid users who regularly access their local paper both in print and online formats and (2) online-only users.

As multiplatform news use is becoming the norm, it is theoretically important to consider simultaneously “alternative market definitions” because “media markets are no longer neatly defined.”¹⁵ A recent study of the so-called “360° news experience” also recommended a theoretical approach “combining the multiple modes of media access and use with-

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in a single brand rather than viewing audience behaviors in each medium separately."¹⁶ Therefore, in analyzing online newspaper readership, it is essential to identify distinctive audience segments based on the use of a demand-related product, which, in this case, is the print newspaper.

Multiplatform News Consumption: Online and Print Newspapers as Related Goods. Economic theories distinguish demand-related goods into two categories: substitutes and complements. Substitutes are goods that can be used in place of each other, and complements are goods that can be used in conjunction with one other.¹⁷ Theoretically, the relationship between two related goods is determined by cross-price elasticity of demand,¹⁸ which determines the extent to which different media compete for different portions of media product and service markets.¹⁹

In reality, the demand relationship between two media products can be tricky. For example, a movie can be consumed either in prerecorded DVD formats or through theatrical exhibitions. When people watch the movie on DVD instead of going to the movies, the two products are substitutes. But when people buy a DVD after watching a movie in the theater, there is a complementary relationship.²⁰ The same complexity characterizes the relation between a newspaper's online and print editions because similar information is published in two formats and the simultaneous use of multiple news media is common among Internet news users.²¹

Research that has sought to gauge the impact of newspapers' online offerings on their offline readership has documented the simultaneous use of online and print newspapers. Chyi and Lasorsa²² examined whether people in a geographic market read one newspaper's print edition and/or that same newspaper's online edition.²³ Results showed that more than 80% of those who visit the local newspaper's Web site also read the newspaper in print format within the same week. A later survey identified similar patterns in Hong Kong, where more than a dozen daily newspapers compete for readership. The overlap of online and print readership was strong among the four largest newspapers, with more than 50% of the local readers who read the Web edition also reading the print edition during the same week.²⁴ A recent study based on Scarborough Research survey data regarding newspaper readership in Washington, D.C., found that 59% of local Washington post.com readers also read the print edition of the *Washington Post* during the previous twenty-four hours. Over a five-day window, 76% of online users did so.²⁵

These studies identified the substantial overlap between the same newspaper's online and print readerships, but a systematic examination of the simultaneous use of print and online products is lacking. Therefore, this study begins by addressing the following research question:

RQ1: Within a geographic market, what percentage of the local newspaper's online readers also read the print edition? What percentage read the online edition only?

Additionally, this study attempts to investigate further how online readers relate to the print product—a related good of online news. For example, how do hybrid users obtain the print edition (e.g., do they pay for it or have access to a free copy)? What percentage of online-only users have access to the print newspaper but choose not to read it? Answers to these questions will help clarify the difference between “access” and “use,” and will shed light on consumer choices between related goods of news. Therefore, this study addresses the following research questions:

RQ2a: Among those hybrid users who do both—read the print edition and the online version of their local newspaper—how do they obtain access to the print copy?

RQ2b: Among users who only read their local newspaper online, what kind of access do they have to the print edition?

From the newspaper’s standpoint, it is also important to understand how hybrid and online-only users differ, particularly in their demographic characteristics, Internet and newspaper site usage, and content interest, as such differences carry important implications for marketing, advertising, and content strategies. Therefore, this study addresses the following research questions:

RQ3: To what extent do these two groups of users—i.e., hybrid and online-only—differ on key demographic characteristics?

RQ4: To what extent do these two groups differ in their Internet use and local online newspaper use?

RQ5: To what extent do these two groups differ in content interest and use of specific site features?

Satisfaction with Online Newspaper Sites. Economic theories suggest that consumers make decisions to maximize utility,²⁶ which is often measured by satisfaction. However, media satisfaction, defined as a “complex emotional response following experience with a product,” remains an understudied subject in communication research.²⁷

In an attempt to conceptualize the perceived utility of online news, Sundar²⁸ identified four criteria (credibility, liking, quality, and representativeness) that are important to news users in their assessment of online news content. Sundar²⁹ also generated three dimensions of news Web site evaluation (site design, coherence, and intent to revisit) and two dimensions for content perception (news quality and news credibility).

Despite continued growth in online news use, intermedia comparisons indicate that online news does not fare well on attitudinal measures. Research shows that online news is perceived as less credible,³⁰ less likable,³¹ and less useful,³² when compared with traditional media. One

survey of more than 25,000 visitors to forty-one news sites discovered that 31% of users found offline news media to be more satisfying, while only 16% found online news media to be more satisfying.³³

Lin and Salwen,³⁴ drawing on the uses and gratifications paradigm, generated four dimensions for perceived online news utilities: entertainment, interpersonal communication, information scanning, and information skimming. They found that online news users who read print newspapers perceive a greater level of utility in skimming for important news online than those who don't read print newspapers.

These studies provided exploratory information regarding perceived utility of online news, but none directly measured user satisfaction with the local newspaper site and whether simultaneous use of the *same* newspaper's print edition (an important related good) influences satisfaction. Therefore, this study examines the extent to which the same newspaper site's hybrid and online-only readers perceive the Web site differently. This study addresses the following research question:

RQ6: To what extent do these two groups—i.e., hybrid and online-only—differ in their satisfaction with the local online newspaper site?

Media satisfaction is determined by multiple factors. To delineate a comprehensive picture, this study attempts to explore these factors by constructing a model predicting user satisfaction with the local newspaper site. Previous studies identified a range of factors affecting online news use and satisfaction, including demographic and socio-economic variables such as gender, age, income, education, and employment status,³⁵ as well as site usage variables such as the frequency of site use.³⁶ This study also includes history of site use, breadth of tasks performed, and use of interactive services, as they constitute key dimensions of Internet connectedness.³⁷

In addition, the use of related goods (e.g., national news sites) presumably may affect user satisfaction with the local newspaper site and therefore is included in the analysis. Thus, this study explores the following research question:

RQ7: What factors determine satisfaction with the local newspaper site?

Finally, to provide a holistic understanding of multiplatform news use, this study examines what factors determine user type. Since user type (hybrid vs. online) is defined by print newspaper use, the analysis includes variables identified by previous research on print newspaper readership—gender, age, education, income, ethnicity, marital status, children in the household, home ownership³⁸—as well as local newspaper site use.³⁹ Site satisfaction also is included, so as to explore the possibility of a reciprocal relationship between satisfaction and user type. Therefore, this study addresses the following research question:

RQ8. What factors determine user type (hybrid vs. online-only)?

Methods

The data used in this analysis were gathered by Belden Associates, a newspaper research and consulting firm that conducted online reader surveys on twenty-eight local newspaper Web sites (see Appendix A) from October 2007 to June 2008.⁴⁰ For the twenty-eight newspapers under study, average Sunday circulation is 95,772, and average weekday circulation is 73,415.⁴¹ While none of the newspapers profiled here is among the nation's twenty-five largest, their average weekday circulation is about twice as large as that of all 1,400 daily newspapers in the United States.⁴² Nevertheless, because Belden Associates examined five newspapers with a circulation greater than 100,000 and five with a circulation of less than 20,000, their data set provides a fairly realistic picture of U.S. daily newspapers in terms of circulation.

Belden Associates' survey focused on online activities, interests, and satisfaction, as well as offline behaviors (such as print readership) and demographics. While visiting the local newspaper Web site, randomly selected users were intercepted with a pop-up invitation to participate in the survey.⁴³ Therefore, each of the twenty-eight surveys was based on a probability sample. However, the aggregate sample of twenty-eight surveys is a non-probability sample.

The data set includes information on users who resided within the print edition's geographic market (72.5%) and others outside the local circulation area (27.5%). Since the focus of this study is local users, only those who resided within the newspaper designated market (NDM)⁴⁴ are included in the analysis. The final sample size is 18,484.

Operationalization. All respondents were asked whether they read the print edition of the newspaper in the past seven days. From that question, two groups of local users were formed: (1) hybrid users who reported having read the print edition, in addition to the newspaper's online site, at least once in the past week; and (2) online-only users who did not read the print version during that time.

Internet use was measured by the number of days they used the Internet during the past seven days. Similarly, local online newspaper use was measured by the number of days they visited the newspaper sites during the past week. Long-term exposure to the local newspaper site was measured by asking users when they had *first* visited the local newspaper site.⁴⁵

Content interest was measured in both news-specific and general terms. Respondents were asked if they were "very interested" in seeing each of forty-seven types of content on the site.⁴⁶ The news interest index was computed by combining four news-related items (local news, statewide news, national news, and international news). The overall content interest index was calculated by adding up the forty-seven items.

Use of specific site features was measured by asking respondents if they used the local newspaper site to search for seven types of information.⁴⁷ The "diversity of features used" index was computed by combin-

ing these seven items. Satisfaction with the local newspaper Web site was measured by a five-point Likert scale ranging from “mostly dissatisfied” to “mostly satisfied.”

Respondents were asked about the number of days that users visited other local or regional news and information sites during the past seven days, and whether they used national news sites⁴⁸ for local news and information. In addition, use of various interactive services⁴⁹ also was measured.

Data Analysis. Because the aggregate sample is non-probability by nature, data analysis fully considered the restrictions associated with such samples.

Cross-tab analyses were conducted to compare differences between hybrid and online-only users on demographic variables.

As for the differences between hybrid and online-only users in Internet use, local newspaper site use, overall content interest, news content interest, diversity of site features used, and site satisfaction, we first present descriptive results based on the aggregate sample. Then we disaggregate the overall sample and conduct twenty-eight follow-up *t*-tests on each variable based on each of the twenty-eight individual probability samples.

To address **RQs 7-8**, this study utilized statistical tools such as ordinal and logistic regression analyses, both of which require random samples. To ensure the assumptions of these tests hold, these analyses were performed on a one-newspaper sample instead of the twenty-eight-paper aggregate sample. To maximize the representativeness of this subsample, we selected a newspaper whose print circulation is the closest to the average of the twenty-eight papers.⁵⁰

To explore what factors determine satisfaction with the local newspaper site (**RQ7**), an ordinal logistic regression analysis was performed because site satisfaction is an ordinal DV with adequate dispersion across five ordered levels. The test of parallel lines yields a significance level of .012, which is significant at the .05 level, but not at the .01 level. To explore factors determining user type (**RQ8**), a binary logistic regression analysis was conducted because user type is a dichotomous DV. A casewise analysis found no outliers.

Results

Sample Profile. The data set contains survey responses from sites of 28 U.S. newspapers representing 27 locales,⁵¹ with a total sample size of 18,484 respondents. The sample is generally comparable with the 2006 survey of newspaper Web site users conducted by the Newspaper Association of America, especially in terms of education and income.⁵²

User Type: Hybrid vs. Online-only. **RQ1** asks what percentage of the local newspaper's online readers within a geographic market also read the print edition, and what percentage read the online edition only. Results show that 66.2% read both online and print editions and 33.8% access the online edition only. In other words, two-thirds are hybrid users and a third are online-only users.

TABLE 1
How Hybrid Users Obtain Access to the Print Copy

	%
Paid Readers	76.7
Delivered to Home (Subscription)	49.8
Bought a Copy	23.7
Delivered to Work (Subscription)	3.1
Free Riders	18.8
Read a Co-worker's/Company Copy	8.7
Borrowed from a Friend, Relative, or Neighbor	5.5
Read/Picked up in a Public Place	4.6
Other	4.7
Obtained Some Other Ways	3.2
Did Not Recall	1.5
Total	100.0

Note: N = 18,484

RQ2a asks how hybrid users obtain access to the print copy of the local newspaper. Table 1 shows that more than three-quarters of the respondents who read the print edition were paying for the newspaper; only 18.8% of those who read the print edition did not pay for it.

RQ2b asks what kind of access online-only users have to the print edition. Results show that 17.8% of online-only users have a print subscription for home delivery of the local newspaper; the subscription either belongs to them or to someone else in the household. Nevertheless, none of them reports having read the printed version within the past week. The remaining 82.2% of online-only users do not have any print subscription.

Differences between Hybrid and Online-only Users. **RQ3** explores the extent to which hybrid and online-only users differ on key demographic characteristics. Table 2 shows the results. None of the variables seemed to effectively distinguish the two groups.

RQ4 asks to what extent these two groups differ on their Internet use and local online newspaper use. For Internet use, hybrid users went online 6.7 days (sd = .9) within the past week and online-only users also went online 6.7 days (sd = .8). Of the 28 follow-up *t*-tests based on 28 probability samples, 25 found no significant difference between hybrid and online-only users in Internet use.⁵³

For local online newspaper use, hybrid users accessed their local online newspaper Web site 4.5 days (sd = 2.3) on average and online-only users 4.7 days (sd = 2.3). Of the 28 follow-up *t*-tests, 14 found hybrid users accessed their local newspaper site less frequently than online-only users.⁵⁴

TABLE 2
Demographic Difference between Two User Groups

	User Type		
	Hybrid Users %	Online-only Users %	
Gender			
Male	44.3	45.7	$X^2 = 3.3, df = 1, n.s.$
Female	55.7	54.3	
Age			
18-34	24.2	28.0	$X^2 = 39.1, df = 2^{***}$
35-54	52.5	51.5	
55+	23.4	20.5	
Race/Ethnicity			
White	80.0	78.4	$X^2 = 6.5, df = 1, n.s.$
Non-white	20.0	21.6	
Education			
Some college and below	53.3	50.3	$X^2 = 15, df = 1^{***}$
Bachelor's and above	46.7	49.7	
Income			
\$49,999 and below	32.2	32.3	$X^2 = .07, df = 2, n.s.$
\$50,000-\$99,999	42.6	42.7	
\$100,000 and above	25.2	25.1	

Note: ** $p < .01$; *** $p < .001$.

Due to the nature of the non-probability sample and the large sample size, results of the chi-square tests serve only as rules-of-thumb references.

RQ5 explores the degree to which these two groups differ in content interest (news-specific and overall) and use of specific site features. For news content interest (4-item index), hybrid users and online-only users got the same score ($M = 2.0, sd = 1.4$). Of the 28 follow-up t -tests, 25 found no difference between hybrid and online-only users in news interest.⁵⁵

Regarding overall content interest (47-item index), the results show that hybrid users were interested in seeing 15.6 content categories ($sd = 8.7$) on their local newspaper site; online-only users were interested in 13.9 ($sd = 8.4$). Of the 28 follow-up t -tests, 18 found hybrid users had a higher overall content interest than online-only users.⁵⁶

Respondents' use of specific site features was examined on seven categories. Table 3 shows that hybrid users were more likely to use all seven types of information on the local newspaper site than online-only users. For example, 62.5% of hybrid users used the site to search for breaking news; only 54.7% of online-only users did so. Similarly, 45.2% of hybrid users used the site to search for entertainment information; 36.3% of online-only users did so.

To explore the diversity of features used by the two groups, the seven items were combined to create an index. Hybrid users used an

TABLE 3
Use of Site Features by User Type

	User Type		
	Hybrid Users %	Online-only Users %	
Local/Regional Breaking News	62.5	54.7	$X^2 = 103.5, df = 1^{***}$
Entertainment Info	45.2	36.3	$X^2 = 134.9, df = 1^{***}$
Local Sports Info	38.7	32.0	$X^2 = 81.8, df = 1^{***}$
Buy, Sell, Personal Goods	23.6	15.6	$X^2 = 162.2, df = 1^{***}$
Jobs, Career Info	32.9	26.8	$X^2 = 72.2, df = 1^{***}$
Automotive Info	14.8	9.3	$X^2 = 109.7, df = 1^{***}$
Real Estate Info/Service	23.5	17.8	$X^2 = 79.6, df = 1^{***}$

Note: $***p < .001$.

Due to the nature of the non-probability sample and the large sample size, results of the chi-square tests serve only as rules-of-thumb references.

average of 2.4 (sd = 1.8) features; online-only users used 1.9 (sd = 1.7) features. Of the 28 follow-up *t*-tests, 14 found hybrid users used more site features than online-only users, while another 14 tests found no significant difference between the two groups.

Satisfaction with Local Newspaper Site. RQ6 considers how the two groups compare in their satisfaction with the local online newspaper site. Hybrid users' satisfaction score was 4.3 (sd = 1.0); online-only users' score was 4.1 (sd = 1.1). Of the 28 follow-up *t*-tests, 16 tests found no significant difference, while 12 tests found hybrid users more satisfied with their local newspaper site than online-only users.

RQ7 seeks to uncover the factors that determine satisfaction with the online newspaper site. The ordinal regression analysis was based on a one-newspaper probability sample of 819 respondents. Explanatory variables in the model include user type (online-only or hybrid), demographic variables (gender, age, education, income, ethnicity, and employment status), local newspaper site use, years of using the site, diversity of site features used, other local news/information site use, national news site use, and interactive services used. Table 4 shows that these variables account for 17.5% of variance in user satisfaction; among the variables, user type (hybrid), gender (female), and diversity of site features used are positive predictors, while national news site use is a negative predictor.

RQ8 asks what factors determine user type (hybrid vs. online-only). The logistic regression analysis was based on a one-newspaper probability sample of 825 respondents. Explanatory variables in the model include gender, age, education, income, ethnicity, marital status, home ownership, children in the household, local newspaper site use, and site satisfaction. Table 5 shows that nearly 70% of the cases were correctly predicted. Three variables (age, having children in the household, and site satisfaction) were positive predictors of use type (hybrid). Having children in the household

TABLE 4*Ordinal Logistic Regression: Predictors of Local Newspaper Site Satisfaction*

Predictors	Estimated Coefficient	(SE)
User Type (Hybrid)	.302*	.147
Gender (Female)	.315*	.140
Age	-.018	.062
Education	-.068	.049
Income	-.043	.044
Ethnicity (White)	-.159	.213
Employment	.104	.174
Local Newspaper Site Use	.050	.037
Years a User Has Been Using the Local Newspaper Site	-.214	.109
Diversity of Site Features Used	.425***	.042
Other Local News/Information Site Use	-.059	.030
National News Site Use	-.210*	.091
Interactive Service Use	-.017	.031
<i>N</i>	819	
Model	$X^2(13, 819) = 157.9$ $p < .001$	
R^2 (Cox and Snell)	.175	

Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

resulted in a 59.8% increase in the likelihood of being a hybrid user. One-unit increase in site satisfaction (out of 5) also resulted in a 24.2% increase in the likelihood of being a hybrid user.

Discussion and Conclusion

This study explored the changing nature of U.S. newspaper readership in the digital age. We began by defining and conceptualizing two groups of online newspaper readers in the local market and compared these groups on key variables. We also constructed two theoretical models exploring the determinants of site satisfaction and user type. Overall, these findings provide new information about the relationship between the print and online editions of local newspapers in the United States, and raise interesting questions for the industry and academy.

First, this study found that, within a geographic market, a majority of the local newspaper's online readers also read the print edition, by roughly a 2-to-1 margin. The relative importance of hybrid users illustrates the prevalence of multiplatform news consumption among today's news audiences.

This study also provided detailed information regarding whether and how these two groups of users differed. In some aspects (i.e., demographics, Internet use, and news content interest), our analysis found no difference between the two groups. In other aspects (i.e., site use, over-

TABLE 5
Binary Logistic Regression: Predictors of User Group (Hybrid)

Predictors	B	Exp(B)
Gender (Female)	.233	1.263
Age	.147*	1.158
Education	-.028	.972
Income	.041	1.042
Ethnicity (White)	.363	1.437
Marital Status (Married)	-.206	1.229
Having Children in Household	.468**	1.598
Home Ownership	.116	1.123
Local Newspaper Site Use	-.063	.939
Local Newspaper Site Satisfaction	.217**	1.242
Constant	-1.120	.326
<hr/>		
N		825
Model	$X^2(10, 825) = 32.8$ $p < .001$	
R ² (Nagelkerke)	.055	
% of cases correctly classified	69.8%	

Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

all content interest, diversity of site features used, satisfaction), subtle differences seemed to exist, as the follow-up analysis identified similar patterns at the individual newspaper level. However, one should take into account effect size when interpreting such results.

Overall, the most substantial difference between hybrid and online-only users lies in the fact that hybrid users were much more likely to use the site to get breaking news, entertainment, local sports, buy/sell classifieds, jobs, cars, and real estate information. In other words, hybrid users were more active users of the site. Why is this so? If hybrid users look to the print edition simultaneously to fulfill some other needs, common sense would suggest that hybrid users are less engaged in the online edition. But our results suggest otherwise. Perhaps the print edition's power to promote the Web version effectively drives hybrid users to these site features. Perhaps hybrid users are more attached to the newspaper as a go-to brand across platforms. Future research should examine the motives behind the dual-platform reading experience in which online and print products complement each other.

This study identifies another seeming paradox, which characterizes online-only users' reading experience. Online-only users visited the newspaper site at least as frequently as hybrid users but were less active in their use of the site features. Perhaps this puzzle suggests that some online-only readers use the Internet as a quick, convenient platform for getting news. Along this line of thinking is recent research suggesting

that online news is an “inferior good,” in the economic sense of the phrase, to the preferred “normal good” of print news; in this sense, online news is like fast food, which provides utility under certain circumstances but is not as appealing as high-end restaurant fare.⁵⁷

To further develop our understanding of multiplatform news consumption, this study sought to construct a model for predicting user satisfaction with the local newspaper site. We found that, when other factors were held constant, being female, being engaged with a diversity of site features, and being a hybrid reader each positively predicted user satisfaction. Moreover, the use of national news sites negatively predicted satisfaction with the local newspaper site. This suggests that, for users accustomed to a richer user experience on national news sites, the local site pales in comparison.

To further explicate the relationship between hybrid use and site satisfaction, in the final regression model we sought to identify predictors of being a hybrid user. We found that being older, having children at home, and feeling satisfied with the local newspaper site online positively predicted hybrid readership; while the first two factors are consistent with previous research on print newspaper use,⁵⁸ the latter point completes the circle and posits that site satisfaction may drive multiplatform news use.

For newspaper companies, these findings more fully distinguish the intersection of their online and print readership. First, consider the implications for the subscription model. In our sample, hybrid users constituted 66% of the online edition’s local readership. Among these dual-platform readers, more than three-quarters paid for the print edition. As newspaper publishers increasingly talk of building paywalls around their online content to ward off free-riders cannibalizing their print product, this study suggests that most local users of the newspaper site *already* are paying customers—by paying for the print edition. Thus, an online subscription or micropayment model would entail asking many users to pay twice—or, if print subscribers are granted free access, it would mean publishers are chasing a minority of online-only users. Moreover, these online-only users are less active and are not more satisfied with the local newspaper site, making a pay model all the more challenging. In essence, in their pursuit of monetizing online content, publishers may very well end up alienating local users (hybrid as well as online-only).

Secondly, that two-thirds of online readers also read the print edition—a rather large overlap in geographic audience—would be of particular interest to advertisers. Considering that local advertising accounts for 90% or more of online newspaper revenue,⁵⁹ local advertisers may have concerns that the online edition does not deliver unique non-print readers in large numbers at the local level. Furthermore, we found that online-only users were less likely to use the classified features—and yet classified-style advertising accounts for 67% of a typical newspaper site’s advertising revenue.⁶⁰ So the difference between hybrid and online-only users in their likelihood of using classified areas of the site carries important advertising implications.

Taken together, this study systematically examines the distinction between hybrid and online-only users of newspaper Web sites on certain aspects. A better conception of the hybrid readership would help the industry tailor its news and advertising offerings in an era of fast-paced transition and change, while at the same time helping researchers gain new perspectives on the nature of news consumption via distinct media. Our findings suggest there is much to learn about the relationship between a newspaper's online and print products. Future research would do well to puzzle out the perceptions, motivations, and behaviors of consumers as they weigh related goods of news and information.

Limitations of This Study

This study took advantage of secondary data. Therefore, only these specific local newspapers were included in the analysis. Although each of the twenty-eight individual surveys was based on a random sample, the data, when aggregated, yielded a non-random sample. Moreover, weighting was not an option because no real population parameters were available.⁶¹

In addition, online surveys for data collection are subject to certain biases. For example, regular or heavy users may be more likely to participate in the survey than one-time users directed to the newspaper site through search engines, and their responses may favor the online medium.⁶² Although the purpose of this study is to compare the difference between two groups of online users, such biases should be taken into account when interpreting the results.

Another weakness, inherent in most secondary data analyses, is that the researchers have no control over the survey instrument. For example, the survey measured how many days within a week one visits the site but not the amount of time spent on the site. In addition, satisfaction with the print edition was not measured, making parallel analysis impossible.

Nevertheless, this aggregate data set included newspapers of various sizes and a large number of online newspaper readers; moreover, it allowed for detailed analysis of newspaper Web site user behavior, which is only achievable through online reader surveys.

Appendixes A & B and Notes follow.

APPENDIX A

Local Newspaper Sites, Print Circulation, and Sample Size

Location – URL of Web site	Print Edition	Weekday Circulation	Sunday Circulation	Number of Respondents
Birmingham, AL – al.com	<i>Birmingham News</i>	143,781	176,390	1,271
Chico, CA – ChicoER.com	<i>Enterprise Record</i>	31,678	33,332	337
Davenport, IA – qctimes.com	<i>The Quad City Times</i>	54,020	68,472	204
Denver, CO – DenverPost.com	<i>The Denver Post</i>	255,935	694,053	1,124
Denver, CO – RockyMountainNews.com	<i>Rocky Mountain News</i>	255,675	N/A ⁶³	1,131
Dubuque, IA – THOnline.com	<i>Telegraph Herald</i>	28,315	33,982	620
El Paso, TX – ElPasoTimes.com	<i>El Paso Times</i>	68,998	83,486	1,085
Erie, PA – GoErie.com	<i>Erie Times News</i>	56,462	79,006	1,000
Goldsboro, NC – NewsArgus.com	<i>Goldsboro News Argus</i>	19,219	22,010	520
Harrisburg/Lehigh Valley, PA – PennLive.com	<i>Patriot News</i>	95,188	145,039	985
Huntsville, AL – al.com	<i>Huntsville Times</i>	51,013	70,682	601
Klamath Falls, OR – HeraldandNews.com	<i>Herald and News</i>	16,612	17,066	440
Long Beach, CA – PressTelegram.com	<i>Press-Telegram</i>	87,637	88,495	410
Los Angeles, CA – DailyNews.com	<i>Los Angeles Daily News</i>	151,215	170,434	848
Middletown, NY – RecordOnline.com	<i>Times-Herald Record</i>	79,122	87,286	1,191
Mobile, AL – al.com	<i>The Press Register</i>	95,699	111,368	555
Montrose, CO – MontrosePress.com	<i>Montrose Daily Press</i>	5,401	5,448	332
Nampa, ID – IdahoPress.com	<i>Idaho Press Tribune</i>	18,691	19,941	247
Pasadena, CA – PasadenaStarNews.com	<i>Pasadena Star News</i>	29,712	29,527	299
Pocatello, ID – JournalNet.com	<i>Idaho State Journal</i>	16,723	17,673	226
San Gabriel, CA – SGVTribune.com	<i>San Gabriel Valley Tribune</i>	42,602	42,162	239
Sandusky, OH – SanduskyRegister.com	<i>Sandusky Register</i>	22,168	26,108	586
Springfield, MA – MassLive.com	<i>The Republican</i>	83,351	124,287	1,423
St. Paul, MN – TwinCities.com	<i>Pioneer Press</i>	184,371	245,597	422
Staten Island, NY – SILive.com	<i>Staten Island Advance</i>	58,034	73,537	651
Vancouver, WA – Columbian.com	<i>The Columbian</i>	46,203	54,328	1,016
Waterloo, IA – WCFCourier.com	<i>Waterloo-Cedar Falls Courier</i>	41,477	50,301	536
Whittier, CA – WhittierDailyNews.com	<i>Whittier Daily News</i>	16,339	15,842	185
Average		73,415	95,772	660

APPENDIX B

Content Interest Items

“Are you very interested in seeing the following on (name of the local newspaper Web site)?”

1. Weather Forecasts
2. Local Traffic Conditions/Road Closures
3. School Closings and Information
4. Local Discussion Forums
5. Personals Ads
6. Breaking News
7. Travel News and Information
8. Information about Restaurants
9. Obituaries
10. Classified Ads
11. Lottery Results
12. Local Business Directory/Listings
13. Local News of the Day
14. Statewide News of the Day
15. National News of the Day
16. International News of the Day
17. Tourist Information about the Local Area
18. Reports on Events in Your Neighborhood
19. Local Crime and Safety Information
20. Local Business News
21. Financial Markets and Stocks
22. Legal and Financial Information
23. Technology and Science News
24. Health and Medical News
25. Home and Garden
26. Community Calendar/Local Schedule of Events
27. Movie Listings
28. Movie Reviews
29. TV Listings and Reviews
30. Cooking and Recipes
31. Pro Sports
32. College Sports
33. High School Sports
34. Local Sports (Youth, Semi-pro, Club Teams, etc.)
35. Gaming (Gambling) Information
36. Automotive-Related Information
37. Real Estate-Related Information
38. Employment Opportunities & Information
39. Blogs, Reader Comment, or Chat
40. Contests
41. Games, Puzzles, etc.
42. Opinions
43. Photo Galleries
44. Special Offers or Coupons from Advertisers
45. Computer, Online, or Video Games
46. Religion
47. Local Columnists

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41. See Appendix A for additional details on how average circulation was calculated.

42. In 2007, the average circulation for a U.S. daily newspaper was 35,683 and 56,501 for weekday and Sunday editions, respectively. See Editor & Publisher, "Circulation of U.S. Daily Newspapers by Circulation Groups," in *Editor & Publisher International Yearbook* (Editor & Publisher, 2008).

43. Participants who completed the questionnaire were entered in a drawing for a cash award.

44. In the newspaper industry, NDM refers to a geographic area specified by the newspaper that does not correspond to predetermined geographic boundaries such as MSA, city zone or county zone. The NDM must encompass at least 75% of the newspaper's paid circulation. See Audit Bureau of Circulations, *Rules & Resources: Newspaper Support Center*, August 10, 2009, http://www.accessabc.com/resources/n_audiencefaq.htm#16 (accessed July 20, 2008). Also see Robert G. Picard and Jeffrey H. Brody, *The Newspaper Publishing Industry* (Boston: Allyn & Bacon, 1997).

45. The response choices were (1) within the past week, (2) one week to a month, (3) a month to six months, (4) six months to a year, (5) one to three years, and (6) more than three years.

46. For the list, see Appendix B.

47. The seven types of site features were (1) local/regional breaking news, (2) entertainment information, (3) local sports information, (4) buy/sell, or personal goods information, (5) jobs or career information, (6) automotive information, and (7) real estate information/service.

48. CNN.com, NYTimes.com, FoxNews.com, and TV network sites.

49. E-mail, instant messaging, text messaging on cell phones, access online information like sports scores, headlines, use GPS locator, download and/or share video, access YouTube.com, access iTunes.com, subscribe to Netflix, access social network sites, use online photo services, download podcasts, use computer video camera for live telephone calls, own vehicle with OnStar, Lojack, or similar system, have pet with HomeAgain or similar lost pet tracker.

50. Specifically, the *Times-Herald Record* (Middletown, NY) sample was used because its weekly circulation (79,122) is closest to the mean of the

twenty-eight papers' weekly circulation (73,415).

51. Both the *Denver Post* and *Rocky Mountain News* are based in Denver, CO.

52. In our sample, 44.8% were male and 55.2% were female. More than half (52.1%) of the respondents were between 35 and 54 years old, 25.5% were 34 and younger, and 22.4% were 55 and older. In terms of education, 12.2% had a high school degree or less, 40% had special/technical training or some college/associate degree, and 47.4% had at least a bachelor's degree. As for income, 32.2% of the respondents had a household income of \$49,999 or less, 42.6% were between \$50,000 and \$99,999, and 25.2% had a household income of \$100,000 or higher. According to the 2006 NAA survey, 50% of newspaper Web site users were male. In terms of education, 15% did not go beyond high school, and 52% had at least a four-year college degree. In terms of income, 22% of newspaper Web site users had a household income of \$100,000 or more. As for age, the percentages presented in the NAA report don't add up to 100%. See Brent Stahl, "Power Users 2006: An Engaging Audience for Advertising and News," *Digital Edge Report*, June 2006, [http://www.naa.org/TrendsandNumbers/~media/PDFs/Power_users_2006%20pdf.ashx](http://www.naa.org/TrendsandNumbers/~/media/PDFs/Power_users_2006%20pdf.ashx) (accessed December 2, 2008).

53. Three tests (RockyMountainNews.com in Denver, CO; SILive.com in Staten Island, NY; PressTelegram.com in Long Beach, CA) found that hybrid users went online less frequently than online-only users.

54. Thirteen tests found no significant difference; one test (MassLive.com in Springfield, MA) found that hybrid users accessed their local newspaper site more frequently than online-only users.

55. Three tests (DailyNews.com in Los Angeles; SanduskyRegister.com in Sandusky, OH; HeraldandNews.com in Klamath Falls, OR) found that hybrid users were more interested in news content than online-only users.

56. Ten tests found no significant difference.

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61. The 2006 NAA survey provides some parameters (such as income and education), but some key information was problematic (e.g., percentages of age groups don't add up to 100%). See Stahl, "Power Users 2006."

62. For example, the overall satisfaction level was more than 4 on a

5-point scale.

63. At the time data was collected for this study, Denver Newspaper Agency's joint-operating agreement organized weekend distribution of the print newspaper as follows: the *Rocky Mountain News* was published only on Saturday and the *Denver Post* only on Sunday. Thus, to calculate a Sunday average circulation for all twenty-eight papers under study here, the *Rocky Mountain News* were dropped.