

Give the People What They Want: A Content Analysis of FM Radio Station Home Pages

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This content analysis of home pages from 365 randomly selected FM station Web sites examined how the industry is using the Web to deliver content. Results show three types of information are most prevalent: details about station events, disk jockey biographies, and contact information for the station. This is significantly different from the type of content listeners have said they desire in previous survey research. However, differences in the presence of station promotional content can be predicted based on expected differences in the demographics and psychographics of the station's target audience.

Radio professionals have started to recognize the World Wide Web as a potential solution to recently troubling concerns. Some have identified the system of interconnected computers and servers as a way to sell more advertising without cluttering their broadcast signal (Keith, 1999). Radio advertising executives have also mentioned how the Web can overcome many of the traditional objections potential advertisers raise about radio. For example, advertisers often berate radio for its lack of visuals, its inability to provide detailed product information, and the lack of tangible coupon opportunities it provides. All of these can be addressed, however, by media campaigns that combine radio spot advertising and Internet advertising on radio station Web pages (Boehme, 1999; Keith, 1999).

Program Directors (PDs) have also recognized, at least in principle, that the Web holds promising opportunities as an outlet for programming content. The Web can be where listeners learn about, and interact with, station disc jockeys. It can also be a place to participate in contests, find out about upcoming station events, obtain local news bulletins, read biographies of musical artists, and make e-mail song requests. A few innovative PDs have started to use their station's Web presence as an outlet for artist development, with new acts or songs being given initial exposure to

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the Web audience when there is no room on the broadcast airwaves due to tight current music rotations (Sands, 1999). A lavish example of this is KIIS-FM in Los Angeles, a Contemporary Hit Radio (CHR) station that launched a Web site called KIIS-FMi in October of 1999. This site programs video serials, movie trailers, and out-takes from recent feature films as well as new music that has not yet received airplay on the KIIS-FM broadcast signal (Novia, 1999). Of course, looking at this single Web presence may not provide an accurate indication of the type of content found on radio station sites in general.

Recent content analyses of other media Web sites have, in fact, demonstrated that traditional media have been relatively slow to utilize the technological and interactive potential of the Web. Two studies, for example, considered the expansion of newspapers onto the Web by exploring questions of design, graphics, news content, and interactivity (Li, 1998; Massey & Levy, 1999). Li found that newspapers were failing to take "full advantage of available technology," while Massey and Levy found levels of interactivity to be "discouraging." Similarly, early research focusing on television sites indicates stations use their presence on the Web to promote specific programs, such as local newscasts or network series, but generally fail to fully utilize the interactive capabilities of the medium (Bates & King, 1996; Bates, Chambers, Embery, Jones, McClung, & Park, 1997; Rosales & Pitts, 1997; Niekamp, 1998). Even more recent research (Nitschke, 1999) shows that less than one third of the television stations responding to a mail survey reported providing streaming media, and only 27% had e-mail capability. On the other hand, a content analysis conducted by Chan-Olmsted and Park (2000) found that almost all (95.7%) of their 300 sampled television stations had e-mail links. Still, due to the lack of more advanced forms of interactivity than e-mail, they conclude that TV stations had not "capitalized on the essence of the Internet medium" when it came to interactivity between site visitors and creators (Chan-Olmsted & Park, 2000, p. 335).

Radio Stations, Radio Listeners, and the Web

There have been several studies investigating the way radio stations and listeners use the Web. Murphy and Rayho (1997) conducted a secondary analysis by collecting ratings and revenue data from stations in the top 75 markets and grouping them according to whether or not the station had a Web site. Results show that stations with sites had statistically higher Arbitron ratings for the spring and summer 1996 ratings periods than stations without them. Furthermore, stations with Web sites had significantly higher mean revenue earnings than stations without them. While these data suggest that a Web presence is related in some way to station success, Murphy and Rayho themselves called for future research investigating the different type of content delivered by radio stations on their sites. In a later study, Murphy (1999) conducted an online survey to see how listeners use station Web sites. Factor analysis of the responses identified seven motives for station Web use: positive identification with the station, aesthetic appeal of the site, downloading

appeal, information appeal, interaction appeal, and relaxation appeal. McClung (1999) used a similar methodology to survey 568 visitors to college radio station Web sites and found that respondents more closely matched the demographics of the college radio target audience than those of Web users in general.

Only one study has systematically analyzed the content of Web sites constructed or sponsored by radio stations. Lind and Medoff (1999) conducted a content analysis of 900 radio station sites in 1998 and determined they contained "surprisingly little informational content" (p. 218). Still, with tremendous pressure within the radio industry to create a dominant Web presence, rapid changes are to be expected. One of the claims of the current study is that certain types of content on radio sites can be predicted based upon the station's broadcast format. However, the first goal is to update Lind and Medoff's data and see what types of content FM radio stations generally have on their Web sites now. Therefore, the following research question is put forward:

RQ1: What content is currently available on the World Wide Web sites of FM radio stations?

Lind and Medoff (1999) also conducted a survey of radio station Webmasters and discovered that many stations had created a site primarily because competitors in their market had done so. This reactionary motivation seems to confirm speculation that stations conduct little or no audience research to determine the type of content listeners actually want to find on their site prior to creating it (Murphy, 1999). This suggests that listeners may not be given what they truly want on station Web sites. Therefore, this study asks:

RQ2: How does the content available compare to the type of content listeners say they want on radio Web sites?

The Web as Promotional Tool

As mentioned earlier, Web content can deliver information about station contests and promotional events. It can also be used to solidify a station's brand image and its programming in the minds of site visitors, resulting in increased audience retention. One of the most basic ways a radio station can generate a brand image is through the regular and repetitive use of the station's call letters, logo, and positioning statement (Pringle, Starr, & McCavitt, 1999). Although the statement's wording and the logo's design will depend upon the type of station, the commonality of their use extends across format differences. In fact, the importance of the "calls and positioner" is so great that it is common practice to mention them every time an announcer opens the microphone (Keith, 2000). It is likely that the importance given to call letters and positioning statements in on-air presentation also manifests itself on the Web through the use of station logos and positioning statements in the visual

presentation of the home page. There are data in the television literature to suggest this expectation. Chan-Olmsted and Park (2000) found that close to 84% of television stations included their logo on their home pages. A similar prediction is made for home pages of radio station Web sites. However, because the overall importance placed upon logos and positioning statements in on-air presentation stretches across formats, it is hypothesized that this will also manifest itself on station Web sites:

- H1: A majority of radio stations will make use of their logos and positioning statements on the home pages of their Web sites. Furthermore, there will be no statistically significant difference between radio stations of different formats in the use of these elements.

Although basic promotional tools such as logos and positioning statements are expected to be found regardless of format, other types of promotional content on Web sites should differ depending on the type of listener the station is trying to retain. In the radio industry, a station's format is chosen to interest audiences with specific demographic and psychographic profiles (Eastman & Ferguson, 1997). Potential on-air promotion and marketing campaigns must be evaluated according to the extent to which they complement the image the format is trying to portray. This results in stations with different formats having vastly different on-air approaches to promotions (Keith, 1987). For example, Adult Contemporary (AC) and Contemporary Hit Radio (CHR) formats are more likely to employ contests and station public appearances than other formats (Eastman, 1991). This is because the psychographics of the CHR and AC audiences make them more likely to spend time participating in on-air contests and attending station-sponsored events than audiences for other popular formats.

Is there reason to think that such differences in on-air promotional content among stations of different formats will be mirrored in Web content? Theoretically, the satisfaction experienced by a visitor to a media outlet's Web presence is related to the ability of the site's content to match or exceed expectations (Chan-Olmsted & Park, 2000). Because the audience's expectations of a radio station are largely due to the format-specific programming delivered on-air, it is likely that station Web designers would want to match the on-air image with the Web image. Recent data show this occurs on television Web sites; Ferguson (2000) found a strong resemblance between television's on-air promotional content and content of its Web promotions.

To date, no one has specifically tested the prediction that such a close correspondence exists between the format of a radio station's broadcast programming and the type of promotional programming a station would have on its Web site. However, using the preceding psychographic distinction between most popular radio formats and the AC and CHR formats, the following hypothesis is made:

- H2: Adult Contemporary and Contemporary Hit Radio sites are more likely to contain contest and station event information than sites of other formats.

To address these research questions and hypotheses, a content analysis was conducted of a randomly selected sample of 365 FM radio station Web pages.

Methodology

Sampling

For this study, the population of interest was the home pages of all FM radio stations with a Web presence.¹ Perhaps the most well-known collections of station Uniform Resource Locators (URLs) in the radio industry are those compiled by trade magazines and proprietary companies designed to deliver live audio of client radio stations via Web-casting. The drawback to using such lists of URLs was the likelihood that they would include only stations subscribing to their magazine or Web-casting services. To improve the representativeness of the final sampling frame, a list was generated from a Web site entitled "The MIT List of Radio Stations on the Internet."² According to the site, this database listed "all known radio stations on the Internet" and allowed access alphabetically by call letters or sequentially by frequency. A sampling frame of 4071 FM radio station sites was downloaded from the site on February 8, 1999. The sampling frame included commercial, non-commercial, and educational stations with a Web presence. A systematic sample with a random start procedure was employed, with the final sample consisting of 407 Web addresses (Babbie, 1998).

Coders, Training, and Reliability

Students in a mass communication research methods course served as coders for this project in exchange for course credit. The use of students as coders has produced reliable results in recent content analyses (Bucy, Lang, Potter, & Grabe, 1999; Kiernan & Levy, 1999). Coders participated in two 75-minute group training sessions where the coding procedures and category definitions were discussed. The final task of each session consisted of coding a radio station home page (one not included in the sampled list of sites) as a group. Prior to coding actual sampled sites, coders met individually with the author to address any questions they had. During these meetings each visited a sampled Web site and separately coded it simultaneously. Discrepancies were discussed and consensus reached.

Coders attempted to access every sampled address using Netscape version 3.0 or higher. If the link took the coder to a non-existent Web site, or if the site accessed was in a foreign language, coders were instructed to visit the next site on the sampling frame.³ Data collection took place between February 10 and 17, 1999, with 365 Web sites accessed during this period.

Unit of Analysis and Coding Procedures

Several published studies have referred to the home page as the "front door" to the Web site (Bucy et al., 1999; Chan-Olmsted & Park, 2000; Ha & James, 1998). Given this concept, it was assumed that the home page would be accessed by the largest number of visitors and, as a result, be the page providing the best indication of what could be found on the site as a whole.

Coders were instructed to identify whether specific types of content appeared on the home page. They also noted if links to that type of content appeared. Some content categories were nominally coded and some were coded as ratio measures, with counts being made of the times that particular type of content, or links to it, appeared on the home page. A complete list of the variables is provided in Tables 1 and 2.

In order to address the two hypotheses, a station logo was conceptually defined as a visual, graphic icon that identifies the station. Coders were given the example of the Nike swoosh as a logo and told that a station logo could, but did not have to, contain the station's call letters. A positioning statement was defined as a concise descriptive phrase or name used for marketing and image creation. Coders were given the examples of "Today's Hit Music," "The All New Q," and "Soft Rock, True Variety, WABC".

Format information was determined after the initial content analysis period by consulting the *Broadcasting & Cable Yearbook* reference guide (Jessell, 1999). This allowed station formats to be quasi-self-reported, rather than subjectively assigned by the Web page coders.

Data Reduction and Analysis

All data were entered into SPSS for analysis. Because the home page was being conceptualized as the "front door" to the entire site, it was decided not to differentiate between content actually on the home page itself and links to content on subsequent pages. Therefore, nominal variables for information access were coded as 1 if either actual content or links to that type of content were present, and 0 if neither were.

The prediction that a majority of stations would use logos and positioning statements was tested using a binomial test (Huck & Cormier, 1996). The other hypotheses were tested using one-way analysis of variance (ANOVA). All of the variables used to statistically test for format differences described in the two hypotheses violated the homogeneity of variance assumption of the ANOVA procedure. The ANOVA test has been shown not to be robust to violations of this assumption (Kirk, 1995), and as a result significant omnibus *F* tests were corrected with the Dunnett's *C* post-hoc test, which adequately compensates for the violation (Lomax, 1992). Therefore, final determination of statistically significant differences between

formats was based on Dunnett *C* comparisons and not merely on the *p* value of the initial omnibus *F* test.

Results

Intercoder Reliability

Approximately 10% ($n = 36$) of the final sample was re-assigned for subsequent coding in order to establish reliability levels. Intercoder reliability was calculated using Scott's Pi. The reliability for nominal variables was .77, and for those measured at the ratio level was .68. The overall average reliability was .75.

Types of Content on FM Radio Station Web Sites

The first research question considered the general type of content available on station sites. A complete list of the frequencies for the nominal-level content variables is provided in Table 1. A list of the descriptive statistics for the ratio-level variables is provided in Table 2.

The type of content that appeared most often was information about how to contact the station. Most (83.5%, $n = 305$) of the pages visited gave at least one way to contact the station or its employees. The most popular mode of communication provided was e-mail. Sixty-three percent ($n = 231$) of the home pages contained station e-mail addresses or e-mail links. Almost half (42.5%) of the sites gave visitors a way to contact the Webmaster. Twenty-three percent ($n = 84$) had opportunities for visitors to e-mail disk jockeys directly.

After contact information, the most frequent type of content was access to information about station disk jockeys. Almost two thirds ($n = 226$) of all station home pages gave some biographical information about their announcers. However, very few of them (8.2%, $n = 30$) provided this information on the home page itself.

The third most available content type was access to information about station events. These ranged from live remotes to details about upcoming station St. Patrick's Day parties. Fifty-four percent ($n = 208$) of the home pages provided access to this type of information. Once again, a much smaller percentage had the information on the home page itself (17.1%, $n = 62$).

Results also show few stations are taking advantage of the technological capabilities the Web can provide (see Table 2). The least used of these technologies is the ability to access streaming video, either in the form of excerpts of music videos or other streaming content. Only 3.9% ($n = 14$) of the stations gave their listeners the opportunity to access video. Similarly, stations were lacking the presence of chat rooms (14.8%, $n = 53$) and links to still Webcams (13.4%, $n = 48$), two technologies that can add a sense of interaction between the station and site visitors. Perhaps most surprising, however, was the low percentage of stations streaming their broadcast

Table 1
Frequency of Sites Containing Nominal Variables (N = 365)

Variables Present	Frequency	Percentage
Station Contact Variables		
Overall	305	83.5
Links to station email	231	63.3
Link to Webmaster	154	42.5
Station telephone numbers	126	34.5
Generic contact link	116	32.4
Snail-mail address	92	25.2
Links to DJ email	84	23.0
Listener surveys/polls/requests	47	12.9
Station Information Variables		
DJ information	226	60.3
Station event information	208	54.0
Contest information	143	39.7
Station playlist	139	37.4
Advertising purchase information	71	19.5
Web advertising purchase information	54	14.9
Station-promotional material sales	46	12.6
List of station advertisers	44	12.1
News/Entertainment Information		
Concert information	160	42.5
Music/Artist information	148	40.5
Weather information	118	31.6
News updates	117	31.5
City information	107	26.4
Links to other radio station websites	76	20.8
Movie/TV news	60	16.4
Charity information	58	15.7
Links to TV station websites	34	9.3
Links to newspaper websites	23	6.3
Other Features		
Site map	231	63.3
Visitor counter	67	18.6
Downloads	62	17.2
Search engine	45	12.4
Address form	19	5.2

Table 2
Descriptives of Variables Measured at the Ratio Level (N = 365)

Variables	% of Sites	# of Sites	Mean	SD
Text links	92.9	339	12.78	9.96
Station positioning statements	90.5	249	4.42	6.75
Station logos	87.6	241	1.86	3.77
Advertisements	52.2	193	1.32	2.03
Drawing links	51.7	186	1.30	2.85
Links to station live audio	29.6	113	.47	1.10
Photograph links	21.4	79	.65	2.27
Links to station recorded audio	15.1	54	.22	.68
Links to chat rooms	14.8	53	.17	.42
Links to pictures from web cameras	13.4	48	.20	.65
Links to audio not from station	5.0	25	.22	2.68
Links to video	3.9	14	.19	2.65

signal (or any other audio) over the Web.⁴ Less than 30% of all stations visited ($n = 113$) had links to live audio streaming. Even fewer (15.1%, $n = 54$) provided site visitors the opportunities to use the Web to time-shift their listening by providing links to archived audio from previous broadcasts.

Do Radio Web Sites Provide the Content Listeners Desire?

The second research question asked the extent to which FM radio station Web pages provide the type of content listeners expressed an interest in. This study did not involve surveying radio listeners or Web users in general to determine the type of content desired. Instead, this research question was addressed using published results of a survey conducted by the radio ratings company Arbitron, in conjunction with Edison Media Research (Verdino & Rosin, 1999). The survey took place in January 1999, approximately one month before the data for the current content analysis were collected. The Arbitron survey consisted of telephone interviews with 1,350 Arbitron diarykeepers from the fall 1998 ratings survey. Respondents were asked to specify things they would be interested in seeing on a radio station's Web site. The results of the Arbitron survey (Verdino & Rosin, 1999, p. 18) can be seen in Table 3, compared to similar variables coded during the current content analysis.

In order to test whether there were differences between the content listeners said they wanted on radio station Web sites and the actual content provided, a Mann-Whitney U test was conducted (Conover, 1971; Huck & Cormier, 1996). Results show a statistically significant difference ($U(11, 11) = 27, p = .028$, 2-tailed) between the rankings in the two data sets.

The most conspicuous results in Table 3 are the mismatches between what

Table 3
Desired Content Versus Actual Content

Content Type	Arbitron	Content Analysis
Community events	70	26.4
Concert information	69	44.0
Titles/artists of songs	61	49.2
Station audio	59	29.6
Contest information	49	39.7
Surveys/vote on songs	47	12.9
Links to advertisers' sites	40	12.2
Contact DJs	34	23.0
Music chat rooms	33	14.8
DJ information/pictures	30	62.1
Purchase station clothing	25	12.6

Note: Table compares percentage of respondents reporting interest in finding a particular content type on radio Web sites (see Verdino & Rosin, 1999) with the percentage of FM Web sites that actually provide content of that type.

listeners say they want most and least, and what the radio stations are actually delivering. Pictures and information about station disk jockeys ranks as one of the lowest listener priorities (only 30% of those responding to the Arbitron survey listed it as interesting). However, they are prevalent on a majority (62.1%, $n = 226$) of the station sites. Similarly, listeners report they value information on community events most highly (70% of Arbitron respondents). When it comes to community events that have no relation to the host station, however, FM radio sites fall far short. Only 26.4% ($n = 107$) of the sites provided listeners with access to community information. Sites where this information could be found on the home page were even more scarce (7.5%, $n = 27$).

Digital streaming technology has advanced to a point that radio listeners can access station audio over the Web. Furthermore, the Arbitron data seem to indicate this is something a majority (59%) of the radio audience desires to be able to take advantage of. Unfortunately, as mentioned above, radio has been sorely under-delivering in this area with streaming audio available on less than one third of the sites.

The Use of Logos and Positioning Statements As Promotional Devices

The first hypothesis predicted that most radio stations would make use of logos and positioning statements on the home pages of their sites. Furthermore, it was expected that there would be no statistically significant difference in their use between stations of different formats.

The entire distribution of formats is shown in Table 4. To address Hypothesis 1, the eight formats that had 20 or more Web sites included in the sample were isolated ($n = 275$).⁵ These formats were Adult Contemporary (AC), Contemporary Hit Radio (CHR), Classic Rock, Classical/Jazz, Country, Oldies, Religious, and Talk.

Table 4
Format of Radio Station Web Sites ($N = 365$)

Station Format	<i>n</i>	Percentage of Cases
Adult contemporary	57	15.6
Alternative	18	4.9
Album-oriented rock	19	5.2
Contemporary hit	24	6.6
Classic rock	23	6.3
Classical/jazz	38	10.4
Country—old	51	14.0
Country—new	10	2.7
Easy listening	3	.8
Hispanic	3	.8
Oldies	25	6.8
Religious	35	9.6
Talk	22	6.0
Urban contemporary	5	1.4
Other	17	4.7
No format reported	15	4.1

Frequency tables were created for the presence of logos and positioning statements on the home pages of these sites. Results show that 87.6% of the stations had at least one logo on their home page. The modal value was 1.00. There was a mean of 1.86 ($SD = 3.77$) logos on the home page. The significant binomial test ($p < .001$) confirms that most stations had logos on their home pages. The presence of a positioning statement was even more common, with 90.5% of the sites having at least one on their home page. The mean number of positioners was 4.42 ($SD = 6.75$) and the modal value was 3.00. Once again, the binomial test was significant ($p < .001$).

In order to test for differences among home pages of stations with different on-air formats, a one-way ANOVA was conducted using the eight formats as levels of the between-groups factor. The dependent variable was the combined number of logos and positioning statements found on each home page. Results show that, as predicted, there was no statistically significant difference in the number of logos and positioning statements on home pages of Web sites for stations of different formats ($F(7, 274) = 1.925, p > .05$). As predicted, a majority of stations implement basic

promotional tools such as logos and positioning statements on their home pages. Furthermore, there is a lack of statistical significance between formats in the frequency of their use. Hypothesis 1 is confirmed.

Format Differences in Promotional Content on Station Sites

Past research has suggested a high similarity between a television station's broadcast promotional content and the content included on their Web site (Ferguson, 2000; Chan-Olmsted & Park, 2000). Furthermore, there is recognition that radio stations of different on-air formats will have different promotional content (Keith, 1987). Therefore, the general prediction was made that the type of promotional content on a radio station Web site should be different for stations targeting different audiences. Specifically, it was predicted that because Adult Contemporary and Contemporary Hit stations have been described as more likely than other formats to use on-air contests and station public appearances to attract an audience, the presence of information about these two promotional tools should differentiate AC and CHR Web sites from those of other formats.

The omnibus *F* test using the eight formats as levels of the between-groups factor and the availability of contest information as a dependent variable proved significant ($F(7, 269) = 7.893, p < .001$). Post-hoc comparisons showed that a significantly greater percentage of CHR stations (74%) and AC stations (59%) had contest information available online than Religious (20%), Talk (14%), and Classical/Jazz (11%) stations. There were no other significant differences between any formats in the presence of contest information.

Using the same statistical design, the effect of format on the presence of information about station events was tested. Here, the omnibus *F* test was also significant ($F(7, 267) = 2.101, p = .044$). Post-hoc comparisons showed that a significantly greater percentage of CHR stations (87.5%) had station event information online than Religious (51.4%), Oldies (44.0%), and Classical/Jazz (50.0%) stations. However, there were no significant differences between the percentage of AC stations with event information (61.4%) and any other format. Hypothesis 2 received support for the CHR format, and partial support—with significantly more contest information but not event information—for the AC format.

Discussion

This first goal of this study was to provide a systematic and representative glimpse of how FM radio stations are using the World Wide Web to deliver content to their site visitors. The second was to determine whether stations seem to be listening to audience desires when designing sites. Finally, two hypotheses were tested predicting that strategies similar to those employed on-air are utilized when using the Web to extend a station's brand image.

In response to the study's first goal, stations seem to be using the Web to deliver three primary types of informative content: information on how to contact the station, information on events being sponsored by the station, and information about station announcers. Unfortunately, this study shows there is a significant difference between the information stations provide on their sites and what listeners want to be able to find there. Survey research conducted by Arbitron and Edison Media Research (Verdino & Rosin, 1999) at roughly the same time as this content analysis shows that listeners have great interest in accessing interactive elements on station sites, something that, aside from e-mail, few stations provided. For example, almost half of the Arbitron respondents mentioned a desire to be able to express their opinions about music online. Less than 13% of stations had any mechanism in place for site visitors to vote on music they wanted to hear. Only 15% allowed listeners to enter chat rooms to interact with others about music or any other topic. Less than 20% gave an opportunity to download files.

The lack of interactive capabilities more elaborate than e-mail replicates findings of other recent content analyses of media-outlet Web sites (Bates & King, 1996; Chan-Olmsted & Park, 2000; Massey & Levy, 1999). Chan-Olmsted and Park (2000) suggested the conspicuous absence of interactivity on television sites was due to stations following a "safer route of expansion" onto the new medium by re-assembling their existing broadcast content for Web use (p. 336). If television's migration onto the Web can be described as safe, then perhaps the general practice by the radio industry should be characterized as overly cautious. Only 15.1% of station sites gave visitors the opportunity to access previously broadcast content that had been "re-assembled" on the site as archived audio. And although almost 60% of surveyed listeners reported a desire to be able to obtain a station's audio delivered live on the Web, this study found less than half that many stations actually doing so. It should be mentioned, however, that this content analysis was unable to determine which stations were restrained from streaming their signals due to uncertainty surrounding music copyright and royalty issues.

It has already been mentioned that technological innovations on the Web can occur very swiftly. In fact, one of the motivating factors behind this study was a desire to update data collected from radio station Web sites only a few years ago (Lind & Medoff, 1999). More than showing that the radio industry has been slow to implement the advanced technological capabilities of the Web, however, the current findings suggest a more troubling possibility—radio management's inattentiveness to the desires of their audiences when determining the informational content of their Web sites. This does not seem to be a case of the radio industry simply being behind the technological curve of a new medium—a situation that would likely dissipate without intervention as time marches on. To illustrate, consider the substantial disparity between stations and listeners when it comes to obtaining information about events in the station's city of license. The Arbitron study showed that this is the type of information listeners most want to find on their favorite radio station's Web site. The current study, however, shows that stations are under-providing listeners

with city information. Less than 3 out of 10 had either city information or links to it on their home pages, even though providing this does not require any technological expertise beyond typing and perhaps programming basic HTML code.

As a side note, it is interesting that the absence of community information coincides with a time when localism is arguably more important than ever in the competitive radio marketplace. Since the passage of the Telecommunications Act of 1996, corporate owners have been downsizing programming and promotions departments as cost-cutting measures (Boehiert, 2001; Potter, Williams, & Newton, 2001). As a result, an increasing number of stations have their music programming and promotions dictated to them from corporate directors who often reside hundreds or thousands of miles away. Under conditions such as these, it is often believed that the stations best able to represent themselves as being in touch with the local listening audience will be most successful. Here, the Web seems an ideal conduit through which to communicate local information to the audience. This study shows that such a realization had yet to be made by the Web site managers of the stations in our sample.

The substantial mismatch between listeners' content desires and station offerings, even in non-technological categories, should lead radio managers to ask a very important question: Is our station's Web site actually doing more harm than good because it is not giving our listeners what they want? Future industry research should concentrate on asking target audiences what they want on station sites and determining ways to deliver it to them. Future academic research should investigate the extent to which the absence of desired content results in measurable effects on audience perceptions of the Web site or even the broadcast station itself.

The current study also confirms that radio stations, regardless of format, do recognize the capability of the World Wide Web as a tool to help extend and strengthen their brand image. As predicted, most stations include both their logos and their positioning statements at least once on their home pages. Furthermore, it is in the area of self-promotion that indications can be found for optimism that the industry will fine-tune its Web content presentation in order to respond to the desires of the audience. Successful programmers already understand how to attract specific target audiences using focused programming materials (Keith, 1987). This focus is also reflected in on-air promotional campaigns designed to retain audiences of explicit demographic and psychographic profiles (Buchman, 1991). Ferguson (2000) has written that radio can be expected to use the Web as an imaging tool for retention-oriented promotional campaigns. Taking that as a beginning assumption, this study predicted the type of content found on radio home pages should reflect the lifestyles and interests of the target audience for the station's broadcast format. In support of this hypothesis, the data show that the presence of information about station contests was more likely to be found on Adult Contemporary and Contemporary Hit Radio sites than on those of other formats. Similarly, the presence of information about on-location station events was significantly able to differentiate sites of stations with the Contemporary Hit format from sites of other formats. So,

while radio is under-performing in many ways in its Web content, when it comes to content that interests the audience and also manifestly promotes the station's brand image through station-sponsored events and contests, radio is doing a good job of knowing what audiences want and giving it to them.

Notes

¹ Only FM radio stations were chosen for this content analysis due to FM's dominant share in total listening. Research shows that more than 77% of all radio listening occurs on the FM band (Moon, 1997).

² This database is now located at the following URL: <http://www.radio-locator.com/>.

³ The recent success of the Spanish-language format in the United States has been well documented (Petrozzello, 1997; Rathbun, 1999). However, the lack of a coder fluent in any language other than English prevented us from attempting to code foreign language content.

⁴ Data were collected prior to the drastic curtailment of live Webcasting due to music licensing liability issues.

⁵ Formats with less than 20 sites were dropped from the analyses because the minimal representation might make generalization to those formats problematic.

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