Following the Leader: An Exploratory Analysis of Twitter Adoption and Use Among Newspaper Editors

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Abstract

Some media critics say Twitter use by newsroom leaders sends a strong innovation message to the rest of the newsroom. This exploratory study examined Twitter use among 74 editors at top U.S. newspapers to evaluate their adoption and use of the social media tool. A content analysis of Twitter accounts revealed many of them were not frequent users. Those who do are primarily using it as a tool to promote content from their own publications. The similarities between this analysis and similar studies would suggest that if newspapers hope to more effectively use Twitter, their leaders need to be willing to do so as well.

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n March 2014, the popular social networking site Twitter was unavailable for approximately 45 minutes. Once upon a time, according to one observer, such a disruption would be viewed just as a minor inconvenience. However, now when Twitter crashes, it is a "full-on problem" (Honan, 2014).

According to Honan, Twitter is no longer just a social media channel used to connect with friends.

It's practically infrastructure: a core component of the global communication system ... It's the definition of breaking news. Twitter is the key place where information is born – stuff that maybe starts with one person but is important to the whole. world. (Honan, 2014, para. 1-2)

For the most part, journalists are fully aware of the value Twitter has as a newsgathering and dissemination tool (Oriella PR Network Global Digital Journalism Study, 2013; Saldana, 2013). In 2013, more than half (59%) of surveyed journalists acknowledged they were tweeting, up from 47% the year before (Oriella, 2013).

Social media has become an important tool for discovering news (American Press Institute, 2014). More than half (52%) of Twitter users rely on Twitter for news, which is second only to Reddit (62%). Twitter is most often used by 18- to 49-year-olds for news consumption (Holcomb, Gottfried, & Mitchell, 2013; Pew Journalism Research Project, 2014). Traditionally, journalists have struggled to attract consumers within this age demographic to their print product. In 2013, a little more than 20% of 18- to 29-year-olds were regularly reading newspapers (Pew Journalism Research Project, 2013). So it would seem that if journal-

ists want to reach the younger audiences, it would be wise to use channels like Twitter.

In many ways, Twitter has changed the way journalists do their jobs. It gives them new ways to find and track breaking news, to identify crowdsource information, and be more aware of activities and individuals deemed important for news stories (Parmelee, 2013). However, the adoption of Twitter has not been without its growing pains. Some journalists claim that Twitter can take up a large amount of time during the day, making it is difficult to complete assignments. It can distract them when taking notes and engaging in other offline activities, and it can lead to an "echo chamber effect" that distorts the importance of certain topics (Parmelee, 2013). Still, the benefits seem to outweigh the costs.

As important as it is for reporters to embrace and use Twitter, Buttry (2011) suggested that it's just as important that editors and newsroom leaders be actively using the social media tool as well. The most urgent challenge facing newsrooms today is making a "swift and successful transformation to the digital future" (Buttry, 2011) para. 5). The most urgent challenge for editors is to lead that transition and — whether they like it or not — Twitter has become a leading indicator of whether the newsroom and its editors are willing to make the change (Buttry, 2011). The criticism of editors reached a crescendo in fall 2014 when digital native publication Buzzfeed took aim at the use of Twitter by reporters and editors of *The* New York Times, calling The Times a "Twitter graveyard" (Warzel, 2014). The question debated in various blogs and comments on those blogs became whether newsroom leaders needed to lead innovation in newsrooms by

participating in social media platforms (Ingram, 2014).

In recent years, researchers have taken a closer look at how journalists are adopting and using Twitter as a news dissemination tool. However, there is no significant research that examines Twitter use among the newsroom leaders. Thus, the purpose of this study is to examine Twitter adoption and use among newspaper leaders.

Literature Review

Diffusion of Innovations

Rogers (1995) defined an innovation as an idea, practice, or object that is perceived as new by an individual or another unit of adoption. According to Rogers, diffusion is a "process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 5). So for the purposes of this study, diffusion of innovations addresses the process by which Twitter (the innovation) is diffused among newspaper editors and used as a tool to disseminate news and information. The study explores whether newsroom leaders have adopted Twitter and how they use the social media tool.

Organizations have long recognized that innovations are the key to success, particularly if they want to survive in an uncertain business environment (Howell & Higgins, 1990; Rogers, 1995; Salaman & Storey, 2002; Tajeddini et al., 2006). According to Mehrtens, Cragg, and Mills (2001), there are three major factors that can influence a business's adoption of the Internet: perceived benefits, organizational readiness, and external pressures. Benefits listed by organizations often involved the relative advantages the Internet offers, particularly in contrast to

traditional communication (i.e. e-mail versus telephone). The relative advantage of the Internet also included access to global sources of information and the advantages it offered in relation to advertising and marketing (Mehrtens et al., 2001).

Adoption in an organization can come at two levels: an organizational adoption and an individual adoption (Frambauch & Schillewaert, 2002). Organization-wide adoption can be influenced by the factors like the organization's preparedness or external factors, while an individual's adoption of innovations can be influenced by an individual's attitude toward the innovation, his or her personal innovativeness, and the social influences in the organization (i.e. employer pressure to adopt the innovation, the opinions of fellow co-workers concerning the innovation, etc.). Additionally, facilitators at the organization can also help influence an individual's adoption of an innovation (Frambach & Schillerwaert, 2002).

Previous studies have examined both the structural effects of diffusion of innovations in newsrooms, as well as the adoption processes in these settings. In a study of newsroom convergence, based on a diffusion of innovations framework, Singer (2004) found that despite cultural clashes and other compatibility issues, journalists saw the clear advantages to convergence. However, the diffusion of convergence was also hindered by cultural and technological differences in the approach to gathering news and disseminating it to the audience. It was also slowed by a lack of training that could help alleviate concerns about the perceived complexities of the new media formats (Singer, 2004). Thus, the structure of the newsroom does factor in to how well an innovation is adopted and implemented.

The size of a news organization has also been a factor in the past, with larger news organizations being more willing to adopt and use technologies than their smaller competitors (Niebauer et al., 2000).

Several factors can influence the adoption and use of interactive elements in online newspapers (Li, 2006). Internal factors can include the size, the length of its web presence, and the makeup of its staff. For instance, bigger newspapers can more easily afford the high first fixed costs of creating interactive websites. Additionally, there is a positive relationship between interactivity and the length of its presence on the web. Websites that have been operating longer are usually more interactive.

The ability for any organization, whether big or small, to adopt cut-edge social media technologies presents substantial opportunities for a more level playing field (Nah & Saxton, 2012). One big advantage Twitter enjoys over other innovations is the ease of adoption. Participating in Twitter does not require extra equipment or complex training. Anyone interested in using a Twitter account just needs to create an online account, which can be accessed from any computer with Internet access or from a smartphone. Factors such as an organization's size, staff makeup, and available capital do not necessarily influence whether the organization adopts Twitter as a news or information dissemination tool.

Adopting social media platforms like Twitter is essential for newsrooms eager to compete in the fast-changing media landscape. Social media has become a driving force for reporting and distributing news (Bastos & Zago, 2013; English, 2014; Hong, 2013; Stassen, 2010). So it is worth briefly exploring Twitter's role in this emerging trend.

Disseminating News

Twitter first gained attention for its ability to dissemination news and information in 2008. During a threeday gun battle in Mumbai, India, individuals in the middle of the conflict used Twitter to provide first-person accounts, pictures, and rumors. This event – later deemed 'Twitter's moment' – left news agencies scrambling to keep up (Caulfield & Karmali, 2008). Since then, Twitter has been at the forefront of nearly every major breaking news story, from deadly earthquakes and plane crashes to the passing of celebrities and public figures. It often serves as an 'early warning system' for breaking news, beating out other forms of traditional news media (Bastos & Zago, 2013; Hitlin & Vogt, 2014; Mataconis, 2011; Stetler & Preston, 2011). Twitter played a prominent role during the violent protests between protesters and the Ukrainian government. It was a pivotal tool used to organize and motivate protestors. At one point, more than 250,000 tweets using the protest hashtags (#Euromaidan) were sent in a 24-hour period, at the height of the more violent protests (Barbera & Metzger, 2014). Researchers noted similar trends in social media use during protests in Turkey in 2013 (Barbera & Metzger, 2013). This led Turkey's prime minister, Recep Tayyip Erdogan, to push through a courtapproved order banning Twitter in March 2014. "We'll eradicate Twitter. I don't care what the international community says. Everyone will witness the power of the Turkish Republic" (McCoy, 2014). The order unleashed a Twitter firestorm from thousands of Twitter users across the world, expressing outrage and even a little humor at the situation. One user tweeted "Well, that's backfiring. The whole world is watching, Turkey" (McCoy, 2014).

While there are plenty of instances where Twitter has been used effectively to share breaking news, there are also plenty of instances where the social network site has been used to circulate false news reports. In January 2012, the managing editor of *Onward State*, an independent student publication at Penn State, prematurely – and falsely – reported the death of former head football coach Joe Paterno through Twitter. Several well-known news organizations, including CBS Sports, picked up the tweet and began circulating the false information through their own channels (Stetler, 2012). The mistake led to apologizes by each of the organizations involved and cost a few reporters their jobs, including the managing editor who sent the tweet (Laird, 2012; Stetler, 2012).

More recently, Twitter and many other social media sites were used to provide real-time news and information related to the Boston Marathon bombings in 2013. At one point, several users tweeted and retweeted the name of a high school student heard on police scanners and mistakenly identified as a suspect in the bombings. One circulated tweet referred to him as a 'suspect on the ground' (Wood, 2013).

Situations like this have brought attention to a growing problem among media professionals, who are often more worried about getting the story first rather than getting it right. This may be why generally just 15% of adults say they have a high level of trust in the information they get from social media, and approximately 37% of users say they mistrust or only slightly trust news they got from social media (American Press Institute, 2014). Speaking of the Paterno debacle, Associated Press editor Lou Ferrara said, "The lesson for everyone should

be that accuracy matters" (Stetler, 2012, para. 1). According to Ferrara, social media tools shouldn't force news organizations to compromise their standards because "this is when (they) need them most" (Stetler, 2012).

Journalists' Use of Twitter

Twitter use by mainstream newspapers has been a topic of interest for researchers in recent years (Bastos & Zago, 2013; Hong, 2012). In 2009, the Bivings Group conducted an analysis of Twitter use by the country's top 100 newspapers. The group examined 300 Twitter feeds, gathering a wide range of data that helped the group determine how these newspapers were using their accounts. Specifically, the study found that 38% of newspapers did not provide links to their Twitter accounts on their websites. Newspapers were sending out an average of 11 tweets per day, with newspapers tweeting anywhere from once to 95 times a day (Rindfuss, 2009). Just over half – 51% – of these newspapers primarily used a Twitter web interface (i.e. Tweetdeck, HootSuite).

However, the more interesting findings dealt with the newspapers' interactions with other users, including retweets and replies. While 37% of newspaper Twitter feeds replied to users in more than 10% of their tweets, 33% of the Twitter feeds replied to users in less than 1% of their tweets. Approximately 15% of these accounts did not reply to one tweet. Just 16% of newspaper Twitter feeds retweeted other users in more than 10% of their tweets, while nearly half – 43% – of the accounts retweeted other users in less than 1% of their tweets. There were 23% of accounts that did not retweet other users once. The group concluded that newspapers are rarely reacting, or even

reading, the comments and updates of users they follow (Rindfuss, 2009).

Similar trends were identified in a study of midsized newspapers (Boyle & Zuegner, 2012). There was little interaction between the newspapers and their followers. Instead, the newspapers were primarily using Twitter as "shovelware." They were relying on automated Twitter feeds to promote stories in their print editions, often tweeting word-for-word headlines from the stories. So the potential offered by Twitter to engage more with followers/ readers has remained primarily untapped by journalists (Boyle & Zuegner, 2012). This might be because journalists view Twitter as more of an obligation. One of the reasons journalists have integrated Twitter into their work routines is a desire to meet their supervisor's expectations that they "tweet and tweet often" (Parmelee, 2013).

Indeed, in a more general sense, journalists are more willing to embrace change if they feel like their managers are effectively managing change (Massey & Ewart, 2012). That includes involving the journalists in the process and ensuring they agree with management's goals for change. Newsroom change will be less likely to take root if the newsroom workers – the "street level" implementers – do not see useful connections between their jobs and management's strategies for managing the change (Massey & Ewart, 2012). While actually adopting and using Twitter does not require much in terms of equipment and cost, it does require change, mainly to the way journalists do their jobs, which was discussed earlier. According to Buttry (2011), editors should be active participants in the change. It's a matter of leading by example. "You don't lead change from your comfort zone. You lead change by showing your staff that you are willing to learn a new skill and suffer the discomfort of learning publicly" (Buttry, 2011, para. 6). An editor who isn't using Twitter provides an excuse for staff members who are reluctant to embrace it. 'If the editor is lazy, timid or arrogant in using or shunning Twitter, the staff will be more likely to be lazy timid, or arrogant in using or shunning Twitter' (Buttry, 2011, para. 17).

A study of sports journalists in Australia, the United Kingdom and India, though not generalizable, found that the journalists were more likely to use Twitter if management required it. One Australian sports manager said it was indefensible and bizarre not to be involved in Twitter. "How can you purport to be a journalist in the year 2012 and not have a social media presence?" he asked (English, 2014, p. 11).

This study focuses on Twitter as the adopted innovation and looks at its use by managing editors, who could be classified as the newsroom leaders of their respective organizations. Specifically, the authors were interested in answering the following questions:

R1: How often are newsroom leaders tweeting?

R2: Are the newsroom leaders using Twitter to promote their respective publications and related content?

Based on previous research, this study also aims to test the following hypotheses:

H1: As the newspaper's circulation increases, so does the frequency of tweets by the editor.

H2: Editors with more followers are tweeting more often than those with fewer followers.

Methodology

The authors coded Twitter pages of top editors at the leading newspapers in the United States. The editors were selected from a list compiled by Easy Media List, an independent media services company. The newspapers on this list were national and regional publications located all over the country. Their place on the list was determined based on their average weekday circulation (Easy Media List, 2014). While the job title of these editors varied based on the publication (managing editor, executive editor, news editor, etc.), the list featured those considered the primary editorial contact person at each of these newspapers. The authors verified the accuracy of the list by conducting an Internet search using the editors' name and publication as search terms or by locating a staff directory on the newspaper's website. There were a few occasions where the list included an editor who was no longer with the publication, so additional searches were conducted to identify the most current top editor at that particular newspaper.

Once the list of editors was verified and updated, the authors located Twitter accounts for the editors using several different methods. First, they conducted an Internet search using 'Twitter,' the editor's name, and his/her newspaper, as search terms. If the authors were unable to locate a Twitter account through an Internet search, they visited and searched newspaper websites to be sure that the editor did not have a Twitter account. In the end, the authors were able to identify 73 of the 100 editors with active Twitter accounts.

The authors coded tweets that were posted during a one-week period, from March 10, 2014, through March 16,

2014. Factors coded in this study include the number of followers, the number of Twitter users they are following, and total number of tweets. The authors also coded for information related to their profile, including whether they included their real name, their newspaper's name, their job title/description, personal information (interests, family, etc.), and a photo of themselves on their profile.

In this analysis, the authors categorized individual tweets into one of three categories - lifecasting, mindcasting, and newscasting. Lifecasting is a term used to describe when someone is using digital media to broadcast more personal aspects of their lives. This could be anything from what you had for breakfast to why you hate Mondays (Rosen, 2009). For this study, a tweet that focused on an editor's personal life, his or her interests, family, friends, etc. was considered lifecasting. Rosen (2009) coined the term 'mindcasting' and described it as posting a series of messages that reflect one's current thoughts, ideas, passions, observations, readings, and other intellectual interests. It is more substantial than lifecasting, 'Here's a thought, question or observation' rather than 'Here's what I had for dinner' (Rosen, 2009). In this study, editors were mindcasting if they tweeted news and other related content that was meant to be informative, but did not come from their own publication. For instance, one editor tweeted a link to a study on the importance of digital journalism, while another shared a YouTube video of a CEO's message to shareholders.

Finally, the authors created a third category, which they termed newscasting. Tweets within this category were those that directed followers to the editor's publication. This included sharing stories, photos, videos, and other related content from the newspaper's website. It also included tweets that promoted events, contests, etc., sponsored by the newspaper, or acknowledged staff accomplishments. In a nutshell, any tweet involving the newspaper was considered newscasting.

In addition to the content of the tweets, the authors examined the level of engagement each editor had with followers. The authors counted the number of tweets that had links back to the newspaper's website, those that included links to outside websites, and those that not have any type of link. The authors counted the number of tweets that solicited participation from readers ('Tweet us your vacation photos' or 'Who do you think is going to win tonight's volleyball game?'), the number of tweets that included hashtags, and the number of tweets that were actually retweets.

Both authors were involved in the coding process, so a reliability test was conducted on seven editor's Twitter feeds (10%) randomly selected from the sample in order to ensure coder reliability. The authors measured the consistency between themselves using the Holsti formula, which is used in order to gain a correlation coefficient that ranges from .00 (no agreement between coders) to 1.00 (full agreement between coders). The test produced a coefficient of .87 which is more than .70 – the minimum requirement for reliability (Holsti, 1969).

Data Analysis

Frequencies were primarily used to identify trends in terms of what editors were tweeting about most often and how often they were tweeting. A series of regression analyses were run to test the hypotheses.

Results

Of the 73 newsroom leaders with Twitter accounts, the authors coded tweets from 70 leaders. The other three are leaders of Spanish-language publications so subsequently their tweets were in Spanish. As neither coder is fluent in Spanish, the leaders were eliminated from the analysis. More than a third of the newsroom leaders (25) analyzed in this study did not tweet during the specified week. Three leaders have active accounts but have not tweeted once. The leaders had an average of 12,783 followers and were following an average of 2,220 other Twitter users. Within the week that the authors examined, there were an average of 25 tweets on the leader's feed.

In answer to the second research question, the newsroom leaders were using Twitter most often for newscasting (M = 17.83). All but two of the leaders who tweeted had at least one tweet that involved newscasting. This included tweeting links to stories on their publication's website, retweeting posts from their colleagues that including links back to their publication's website, and tweeting to promote or highlight accomplishments by their publication and staff. After newscasting, leaders used Twitter for mindcasting (M = 5.11). Half of these leaders had at least one tweet that was used for mindcasting. This included tweeting news and information that directed followers to organizations other than their own, such as other news media, community organizations, etc. The leaders used Twitter least often for lifecasting (M = 2.17), only occasionally tweeting about things related to their personal life. interest, etc. Just 21 of the leaders had at least one tweet that involved lifecasting. So these results would suggest that the leaders are using Twitter most often to promote

Table 1
Breakdown of Mean Scores for Twitter Variables

Variable	M	
Followers	1,895.13	
Following	630.23	
Gender (Male / Female)	52 / 18	
Publication on Twitter	69	
Picture on Profile		
Self	65	
Other	4	
None	1	
Profile Description		
Job	42	
Personal	24	
Both	2	
None	2	
Reply	0.97	
Total Tweets	3,106.41	
Tweets/Week	24.93	
Newscasting	17.83	
Mindcasting	12.22	
Lifecasting	2.17	
Link		
Newspaper	15.53	
Outside Link	4.39	
No Link	5.07	
Hashtag	4.94	
Feedback	0.29	
Retweet	6.87	

and share content from their own organizations. See Table 1 for a complete list of means.

The leaders were not particularly active in engaging other followers through their Twitter feeds. A large amount of their engagement with other followers came through their retweets (M = 6.87), followed by hashtags (M = 4.94). However, it worth noting that more than half (38) of the leaders did not have one retweet, and more than half of them (38) did not have one hashtag in their tweets. The leaders engaged readers least often through using Twitter to solicit feedback (M = 0.23). Only 10 of the leaders had at least one tweet that solicited feedback from followers. This lack of engagement, combined with other portions of these results, including the limited tweeting that took place, would suggest that many of the newsroom leaders are not using Twitter effectively.

The authors hypothesized as the newspaper's circulation increased, so would the number of tweets posted by the editor. To test this, the study utilized several regression analyses, using circulation as the independent variable and number of tweets overall, number of tweets within the designated week, and number of tweets within the different news types as dependent variables. Circulation was not a significant predictor of the number of overall tweets $(\beta = -.111, p > .05)$ and the model was not significant $(R^2 = .006; R^2 \text{adj} = -.008, F(1,68) = .422, p > .05)$. Circulation also failed to predicted the number of tweets within the specified week $(\beta = -.080, p > .05)$ and the model was not significant $(R^2 = .006; R^2 \text{adj} = -.008, F(1,68) = .439, p > .05)$.

An additional set of regression analyses were conducted with the number of tweets in the three tweet categories (newscasting, mindcasting, lifecasting) serving as dependent variables. A newspaper's size did not significantly predict the number of newscasting tweets ($\beta = -.082$,

Table 2
Regression Analysis of Circulation, Number of Tweets,
Number of Followers

Variable	Circulation	No. of Followers
Overall tweets	111	.194
R2	.006	.038
$\mathrm{DR}2$	008	.024
\mathbf{F}	.422	2.67
Tweets within a	080	.085
week		
R2	.006	007
$\mathrm{DR}2$	008	.007
\mathbf{F}	.439	.489
Newscasting	082	.028
Tweets		
R2	.082	.028
$\mathrm{DR}2$.007	.001
\mathbf{F}	.460	.054
Mindcasting	012	.221
Tweets		
R2	.012	.221
DR2	.000	.049
\mathbf{F}	.010	3.49
Lifecasting Tweets	066	.123
R2	.006	.123
$\mathrm{DR}2$.004	.015
F	.294	1.05

p > .05), mindcasting tweets (β = -.012, p > .05), and lifecasting tweets (β = -.066, p > .05). There was also not a significant relationship between the number of followers and the number of newscasting tweets (β = .028, p > .05), mindcasting tweets (β = .221, p > .05), and lifecasting tweets (β = .123, p > .05). Thus, the analysis failed to support the Hypothesis 1.

In the final set of regressions (Table 2), the number of followers served as the independent variable while overall tweets and tweets within the specified week were again the dependent variables. The number of followers did not significantly predict the number of overall tweets (β = .194, p > .05), and the model was not significant (R^2 = .038; R^2 adj = .024, F(1,68) = 2.67, p > .05). It also failed to predict the number of tweets within the designated week (β = .085, β > .05) and again the model was not significant (β = .007; β = .007; β = .007, β = .007, β = .489, β > .05).

Discussion

In 2011, Buttry called out editors for not being on Twitter. Three years later, a more systematic examination of the Twitter feeds of 70 newsroom leaders of leading newspapers found more than a third of them did not tweet during the week studied. Buttry portrayed the editors' use of Twitter as a signal they were willing to lead the transformation to a digital present and future by going beyond their comfort zones. With an even larger-scale adoption of Twitter itself and more use of Twitter as a new source, these newsroom leaders still appear to lag behind. This would appear to support the suggestion made in previous research that journalist are embracing the concept of social media more than they enact the practice (Lariscy, Avery, Sweetster, & Avery, 2009).

Editors are under pressure to produce both a print product and lead the way to the digital as the scramble continues to find a news business model. The stakes are as high as ever. Authors of the Tow Center for Digital Journalism's *Post-Industrial Journalism: Adapting to the Present* report flatly state: "No solution to the present crisis

will preserve old models" (Anderson, Bell, & Shirky, 2012, "Restructuring," para. 9). They contend that "understanding the disruption to news production and journalism, and deciding where human effort can be most effectively applied, will be vital for journalism" (Anderson et al., 2012, "Section 1," para. 12).

As noted in Massey and Ewart (2012), newsroom change is less likely to take root if newsroom workers don't see connections between the change and management's strategies for the change. As newsroom staffs decrease and workload expectations increase, it can be argued newsroom leaders must lead by example.

All journalists, including editors, need an understanding of social media and its impact on journalism, an impact combined with new platforms and devices for news consumption and news participation. Instead of the traditional role of gatekeepers, journalists often are 'gatewatchers,' curating material released by other sources as other social media users also highlight, share and evaluate material (Bruns & Burgess, 2012). Twitter is an 'awareness system' that's part of what Hermida (2010) refers to 'ambient journalism,' defined as media environment that is saturated with news and information. Making sense of that new reality requires an understanding of not only Twitter, but also the social landscape that is based on a network 'always-on communication systems' (Hermida, 2010).

Others have referenced that same landscape, one where editors and newsroom managers appear to be continuing the trend to 'tie the compensation of journalists to the amount of web traffic and/or articles they generate' (Carr, 2014: para. 6). Certainly editors have to be cog-

nizant of the tools used to help generate that web traffic. As Ingram (2014) notes:

There's a temptation within many newspapers to believe that the only problem the web has created is how to get all that excellent journalism to readers most efficiently, and to see the social web as a distribution mechanism or PR gesture. Engaging with readers is much more than that — it's the key to developing a new kind of interactive, two-way journalism, and that journalism may ultimately be the only kind that survives. ("Journalism," para. 4)

The results of this study suggest that few newsroom leaders are consistently and effectively using Twitter
use as a news dissemination tool and a way to engage
readers and the community. Previous studies have found
that newspapers in general aren't completely tapping into
Twitter and the opportunities it provides (Boyle & Zuegner, 2012; Rindfuss, 2009). They are often using it for
shovelware, rather than creating new content, and they
sporadically engage with other followers. The similarities
between previous studies and this analysis would suggest
that if newspapers hope to more effectively use Twitter,
their leaders need to be willing to do so as well.

There were several limitations to this study. Editors may use the newspaper's Twitter account or some other account to tweet. Limiting the study to one week also raises the possibility of a vacation or other reasons that may have kept the editor from tweeting during that time period.

It is also worth noting that this is an exploratory study and there are opportunities for more detailed and thorough research. Specifically, it would be beneficial to survey newsroom leaders to better understand their views in relation to Twitter and its use as a news tool. It also would be beneficial to survey reporters and others to study what influences their use of Twitter.

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