Apr 15th, 1:00 PM - 2:30 PM

Following the lead of Barack Obama, CNN, and Ashton Kutcher: Police departments’ use of Twitter

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Repository Citation
http://digitalscholarship.unlv.edu/grad_symposium/2010/april15/5

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Abstract

An increasing number of police departments are using Twitter to communicate with the public. As with any emerging communications technology, there is considerable variation in the usage of this medium. This study reports the results of a content analysis designed to determine how police departments are using Twitter.

Introduction

Police Department Communication

Community policing has become a widely adopted philosophy utilized by police departments (PDs) around the United States and internationally. The ultimate goal of community policing is crime prevention, which is viewed as a collaborative effort between police and citizens. An essential component of the community policing perspective is expanded direct public communication. Recently, PDs have started to capitalize on Web 2.0 social media tools such as Twitter to increase community interactions.

Twitter

Twitter has become a widely adopted social networking tool used for public communication by private individuals, celebrities, politicians, and groups/organizations such as news agencies. Twitter users can post and view messages (tweets) from individuals or groups of interest online, through mobile phone applications, or via text messages. Users can also “follow” specific individuals or groups to receive tweets in real time. Tweets are limited to 140 characters in length. The brevity of the message length can pose challenges when complex or lengthy information must be communicated.

Current Study

The current study analyzes the content, frequency, and clarity of police tweets.

Methods

Sample/Procedure

The largest 61 PDs (based on UCR rank) in the United States were examined; 22 had Twitter pages. All tweets posted by these departments over a 6-month period (May 15 to November 15, 2009) were collected. This resulted in a sample of 3,512 cases. Tweets were coded, using a latent analysis approach, by one of several coders. Reliability analyses revealed 91% initial agreement for tweet clarity and 84% agreement for content.

Results

Frequency of Communication

There was a mean tweet rate of 1.54 tweets/day. However, this number was inflated by outliers. The median rate was 0.50/ per day, and the range was from 0.04 to 10.13/day. We failed to find a relationship between department size and tweet rate.

Clarity

The majority (91%) of the messages were coded as clear, indicating that most of the PD tweets were easily understood.

Hyperlink

Nearly half (46%) of the messages contained hyperlinks. Common hyperlinks directed followers to news releases and media images.

Number of Followers

Bivariate analyses revealed a significant relationship between the number of followers and number of tweets. However, the relationship was not significant when using the standardized measure. This finding is likely due to the small sample size (N=22), as the correlation was quite strong (.214). The presence of a Twitter logo also failed to achieve significance. This may also be the result of limited statistical power.

Variables

- **Content** – Each tweet was coded using the following categories:
  - Crimes
  - Public Relations
  - Situation Control
  - Missing Persons
  - Crime Prevention Tips
  - Warnings about Potential Crime
  - Motor Vehicle/Traffic
  - BOLO/Seeking Information
  - Other

- **Clarity** – Is the intent of the message understood in 140 characters?

- **Hyperlink** – Does the tweet contain a hyperlink?

- **Followers** – Number of followers for each PD website.

- **Logo** – Was a Twitter logo on the official PD website?

- **Tweet Rate** – A standardized rate was calculated to control for differences in the data collection period: # Tweets/# Days on Twitter during data collection period

Tweet Content

The most common message category was Crimes (33%) followed by Other (20%) and Public Relations (19%). Missing Person, Warnings, and Situation Control messages rarely occurred (less than 2.6% combined).

The table below reveals the tweet rate and most common categories for the 10 most active departments.

<table>
<thead>
<tr>
<th>City</th>
<th>Tweet Rate</th>
<th>Missing Person</th>
<th>Crime Prevention Tips</th>
<th>Warnings</th>
<th>Situation Control</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albuquerque</td>
<td>10.13</td>
<td>1.7%</td>
<td>4.6%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Richmond</td>
<td>5.70</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Denver</td>
<td>3.72</td>
<td>2.2%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Baltimore</td>
<td>3.12</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Seattle</td>
<td>1.81</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Dallas</td>
<td>1.21</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>0.90</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>New York</td>
<td>0.67</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>0.50</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>0.38</td>
<td>1.5%</td>
<td>1.2%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

N = 3,512

Conclusions

This exploratory study revealed PDs are using Twitter to communicate a wide range of messages. Trends among the most active departments suggest some are using Twitter in a manner consistent with a community policing perspective.

While Twitter is being used to increase awareness, much of the communication appears to be “one-way.” The limited length of Tweets may prohibit true interaction with the community. Other social networking sites may be better suited to meeting this goal. Future research should explore the use of alternative social networking sites and identify best practices for police departments use of social media.