A Quantitative Content Analysis of COVID-19 Communication on Texas Agriculture Organizations' Websites

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Introduction/Need for Research

For many in the Texas agriculture industry, the COVID-19 pandemic was a crisis, as economic losses across multiple sectors of Texas agriculture were estimated at $6 to $8 billion (Outlaw et al., 2020). Coombs (2012) defines a crisis as, "the perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization's performance and generate negative outcomes" (p. 2). Crises may be intentional acts or unforeseeable or unavoidable events, such as disease outbreak (Ulmer et al., 2007). Crises are often rapidly changing situations that require large amounts of information (Coombs, 2012). Agriculture companies and organizations have an important role to play in developing crisis communication materials to tell agriculture's story (Irlbeck et al., 2013). The internet plays an important role in the evolution of crisis communication (Coombs, 2012), and organizations should incorporate crisis communication on their website as stakeholders turn to websites as a source of information (Taylor & Perry, 2005).

Theoretical Framework

Media Richness Theory was originally developed to help managers identify the most effective media for message flow through an organization (D'Urso & Rains, 2008). The theory states that media can be either rich or lean depending on its ability to, "overcome different frames of reference or clarify ambiguous issues to change understanding in a timely manner" (Daft & Lengel, 1986, p. 7). Richness is based on the medium's capacity for immediate feedback, the number of cues and channels utilized, personalization, and language variety (Daft & Lengel, 1986). Face-to-face communication is regarded as the richest media, while computer spreadsheets or memos are examples of lean media (D'Urso & Rains, 2008).

Methodology

The purpose of this study was to explore whether Texas agriculture organizations communicated about COVID-19 to stakeholders and determine which media they used to communicate if they did so. This study consisted of a quantitative content analysis of Texas Agriculture Council members' websites. TAC is an informal organization comprised of 72 organizations representing the majority of agricultural industries in Texas (Texas Agriculture Council [TAC], n.d.). After removing entries from the TAC member list who were not Texas-based organizations or whose websites were not properly linked, $N = 51$ websites remained for analysis. We developed a codebook based on previous media richness and crisis communication studies (see Daft & Lengel, 1984; Daft & Steers, 1986; Greer & Moreland, 2007). Two coders were trained on the four codebook definitions spanning the lean to rich media continuum (Krippendorff, 2013; Daft & Lengel, 1984; Daft & Lengel, 1986). All coders coded 10% of the sample to obtain an interrater reliability above .80 using Krippendorff's alpha (.81). For each website, we used

dichotomous variables (0 = not present, 1 = present) to record COVID-19 related outside links, press releases, and written announcements under the code of "lean media," blogs, newsletters and addressed letters under the code of "lean to medium media," podcasts and webinars under the code "medium to rich media," and video conferences under the code of "rich media". Coders did not navigate beyond one click of the homepage or news/blog/media page of each website. Coders accessed the websites July 3-6, 2020. Descriptive statistics were used to analyze the data.

Results/Findings

Of the Texas agriculture organization websites analyzed ($N = 51$), 58.8% ($n = 30$) communicated to stakeholders about COVID-19 on their websites. Of these organizations ($n = 30$), 96.7% used a "lean media" to communicate about COVID-19, 56.7% used a "lean to medium media," 20% used a "medium to rich media," and two (6.7%) used a "rich media." Half of the websites (50.0%, 15) provided stakeholders with COVID-19 communication that fell under only one of the four lean to rich media codes. Nine (30.0%) websites contained media that fell under two of the lean to rich media codes, four (13.3%) fell under three codes, and two websites (6.7%) communicated about COVID-19 through media that fell under all four codes. The most common media found on the websites was written announcements (66.7%, 20) and the least common media utilized on the websites was video conference (6.7%, 2).

Conclusions/Implications/Recommendations

Although more than half of the websites provided COVID-19 related communication within one click of either their homepage or news/media/blog page or both, many ($n = 21$) did not prominently communicate about COVID-19. Organizations are expected to communicate early and often during a crisis to reduce uncertainty (Ulmer et al., 2007), and practitioners should be aware of this expectation during unforeseeable or unavoidable crises. Future research should determine whether TAC members utilized other media, like email or social media, to communicate directly with their stakeholders.

TAC members relied heavily on "lean media" to communicate about the pandemic on their website, while very few organizations utilized a "rich media." Communicators should utilize a rich media for complex, ambiguous messages and lean media should be used for unequivocal messages (D'Urso & Rains, 2008; Daft & Lengel, 1986). Crises are inherently ambiguous situations (Coombs, 2012), so practitioners should ensure the richness of the media they choose fits the situation they are communicating about.

Half of the websites coded communicated through media that utilized more than one code on the lean to rich media continuum, despite the fact organizations were likely communicating with an audience that had many different frames of reference. Future research should determine how TAC members decided on the media they would use to communicate with stakeholders and whether those decisions were aided by existing resources, like a crisis management plan.

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