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United Airlines' and American Airlines' online crisis communication following the September 11 terrorist attacks

Clark F. Greer*, Kurt D. Moreland

Communication Arts Department, Cedarville University, 251 N. Main Street, Cedarville, OH 45314, USA

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Abstract

The terrorist attacks of September 11, 2001, provided a challenging series of events for the crisis communication efforts of American Airlines and United Airlines. Based on crisis communication theory and organizational use of the Web, this study examined how the two companies used their Web sites during the first three weeks after the incidents as one means of conveying information following the attacks.

Theoretically, analysis of incident-related segments of the two sites showed that the airlines evidenced key elements of crisis response. They provided instructing communication by giving facts, stating how their publics should take action, and providing information regarding how the problem was being corrected. Additionally, they offered adjusting communication through a series of condolence messages and links to relief organizations before emphasizing normal operations.

From an online perspective, this study revealed that the Web enabled both companies to provide an immediate response to the attacks. The Web also allowed United and American to offer frequent updates about the incidents to their publics and to communicate their crisis response process to various publics simultaneously.

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An essential part of organizational communication is responding to crisis situations. The terrorist attacks of September 11, 2001, provided a challenging series of events for the two airlines involved in the incidents. Although airline companies had encountered incidents such as hijackings that occurred since the late 1950s¹ and aircraft bombings during the 1970s and 1980s,² the airlines directly affected by the attacks and the industry as a whole had not previously faced incidents of the type and magnitude of 9/11. Despite industry attempts to

* Corresponding author. Tel.: +1-937-766-4971; fax: +1-937-766-7583.

E-mail addresses: greerc@cedarville.edu (C.F. Greer), moreland@cedarville.edu (K.D. Moreland).

assess potential areas of crisis, such “unpredictable events” create a climate of uncertainty for those companies and place airlines in a continual pre-crisis mode.³ Additionally, modern media contribute to the visibility of airline disasters, creating an even higher level of complexity for a company’s crisis management efforts.⁴

The manner in which airlines have handled crisis situations has been examined by a number of researchers. Fishman reported on the response of ValuJet following the crash of one of its aircraft in a Florida swamp in 1996.⁵ Saunders focused on internal communication by examining Eastern Airline’s employee crisis communication from the perspectives of the airline’s pilots.⁶ Benoit and Czerwinski used image restoration theory to study USAir’s response to media messages about the crash of one of its aircraft in 1994.⁷ Pinsdorf examined cultural issues of crisis communication in relation to disasters involving several transnational airlines.⁸

Although scholars have analyzed airline crisis communication from a number of perspectives, research is scarce regarding the use of online communication following a major incident. This is particularly important given the increased use of the Web by organizations to communicate with a variety of publics. The purpose of this study is to examine how United Airlines and American Airlines used their Web sites as one means of conveying information following the terrorist attacks of September 11, 2001. Specifically, this study focuses on the way in which both companies provided an immediate online response to their crises.

1. Crisis communication response

Public relations and organizational communication literature have long touted the importance of openness and candor in crisis communication response.⁹ Openness/candor includes being available to the media, being willing to disclose information and being honest.¹⁰ Most scholars have suggested that institutions should disclose essentially complete, timely and accurate information to the media/public during a crisis. Even those scholars who question complete openness/candor tend to focus on specific exceptions such as legal liability, institutional survival, proprietary information or privacy issues.¹¹

Sturges suggested that effective crisis communication response requires customizing message content based on the stage of the crisis and the type of information needed and desired by constituents. Sturges posited that prior to a crisis, or in the early part of the crisis, build-up messages should focus on “internalizing” information designed to precondition publics to the organization’s position on the crisis and create positive opinions about the organization. As a crisis becomes imminent and during the breakout stage, Sturges suggested that message content shift to “instructing” communication designed to prepare important publics how to respond to a crisis. As the immediate effects of the crisis subside, Sturges suggested that message content should shift to “adjusting” communication designed to help people psychologically cope with the crisis. Finally, as the crisis enters abatement, Sturges proposed “internalizing” message content should again be emphasized.¹² It should be noted that, while a certain type of content is predominant in each stage, communication content related to the other stages may still be presented at any point during the crisis response.

In addition to communicating quickly, consistently (speaking with one voice), and openly, Coombs emphasized the importance of instructing communication and being sympathetic dur-

ing an initial crisis communication response.¹³ Coombs stated that instructing communication should provide basic information about what happened, what appropriate publics need to do to protect themselves from a crisis, and what is being done to correct the problem.¹⁴ In an empirical study, Coombs found that increased statements of compassion improved perceptions of organizational reputation, account honoring, and supportive behavior.¹⁵

As the crisis is contained and recovery is pursued, Coombs recommended that stakeholders be advised of recovery progress, the cause of the crisis, and actions being taken to prevent a repeat of the crisis. Coombs also emphasized a timely response to stakeholder inquiries and genuine expressions of compassion to victims.¹⁶

2. Corporate Web communication

The Web has provided an increasingly important component for public relations and organizational communications professionals. Web sites can help organizations build relationships with their publics,¹⁷ offer diverse publics a variety of company information and services,¹⁸ facilitate easier and faster communication with the media,¹⁹ and provide a means of responding to critics and correcting misinformation.²⁰ Despite the growing importance of online communication, research has found that organizational sites tend not to offer employee communication,²¹ and that sites are limited in the use of technologies²² such as interactivity,²³ and audio and video.²⁴ Furthermore, Hill and White cautioned that the Web should be seen as a supplement rather than a replacement for traditional communication methods.²⁵

Organizational use of online communications during a crisis is especially pertinent to the present study. Coombs argued that the Web should be an essential communication tool during a crisis.²⁶ By providing an immediate means of response, the Web helps to communicate to the public and the media.²⁷ Additionally, disaster plans must provide information and help to employees, particularly those who cannot receive messages through usual communication channels.²⁸ Indeed, following the September 11 terrorist attacks, corporations and organizations used various forms of online communications to disseminate information to their diverse publics.²⁹

The present study sought to examine how United Airlines and American Airlines used their Web sites as a means of providing an immediate online response to the terrorist attacks of September 11, 2001. Of primary interest is whether or not information posted on those companies' Web sites exhibited specific stages of crisis communication in relation to those incidents. A secondary issue is the features of the airlines' Web sites when they were used as a tool for crisis communication.

3. Method

This study was conducted through an analysis of United Airlines' and American Airlines' Web sites (including the site of American's parent company AMR) following the September 11, 2001, terrorist attacks. Data were gathered by accessing the sites of the two airlines from

September 11 to October 9, 2001, and printing pages from the airlines' Web sites that were primarily associated with information about the incidents.

Accessing and printing pages from the airlines' sites occurred two times on September 11: once during the 1:00 p.m. hour and a second printing during the 4:00 p.m. hour. From September 12 through 19, incident-related portions of the two airlines' Web pages were printed three times per day: once during the 9:00 a.m. hour, a second time between 1:00 and 2:00 in the afternoon, and a third time during the 4:00 p.m. hour. Obtaining information three times per day during the first week enabled a more detailed analysis of the two sites to determine the extent of Web activity by the airlines. From September 20 through October 9, pages from the sites were printed only during the 4:00 p.m. hour. Pages were printed with less frequency during the last two weeks of this study because the researchers found that few changes were being made to the two sites after September 19 and, therefore, did not warrant multiple printings.

Material printed from United Airline's site (www.ual.com) included any special incident-specific pages, as well as information from United's regular Web pages that contained links to the incident-related pages. Data gathering from American's Web site included printing incident-specific pages from the American Airlines site (www.aa.com), as well as from the AMR corporate site (www.amrcorp.com). In fact, most of the American Airlines' information related to the incidents was found on the AMR pages, but was linked from the American home page or from the special opening page.

In order to determine the daily and cumulative number of incident-related messages posted by the airlines to their Web sites, the researchers conducted a post hoc analysis of the sites' contents. Included in the analysis were additions and deletions of individual company generated messages (e.g., press releases, Fact Sheets, and CEO messages) and links to outside organizations. Changes to existing messages were not counted as a new message.

4. Online crisis response

4.1. Day one

Coombs argued that an organization's initial response to a crisis should be quick, consistent, open, sympathetic, and informative.³⁰ By 1:00 p.m., both United and American had initiated an online resource specifically to disseminate information about the incidents to their different publics. This included posting a special page that users saw when they first accessed the companies' Web sites. The two airlines further evidenced instructing communication by informing their publics how to respond, which adheres to the pattern of crisis response suggested by Sturges.³¹

Throughout the day, the two airlines posted several pieces of similar information. First was an expression of sympathy from then-Chairman and CEO of United Airlines Jim Goodwin, and then-CEO and Chairman of American Airlines Donald Carty. Messages by the CEOs also included statements that the airlines were assisting the victims' families and provided toll-free phone numbers for those individuals. Since Web pages are accessed by various types of publics, the airlines also directed the media to contact the FBI for information about the incidents. At the same time, the companies assured their publics that they were working with authorities.

There were also some key differences between the airlines' first day online response to the crisis. One contrast was the initial message seen on the special Web pages. By the 1 p.m. hour, the opening page on United's site featured an expression of sympathy by the company's CEO, a statement indicating that United was working with "relevant authorities," toll-free phone numbers for families, and information about flight suspensions. Although American also provided an incident statement on the first page, the message posted by 1:00 p.m. was brief and dealt only with the cancellation of flights. It was not until later the first day that the airline expanded the information on the special page to include more details about the incidents. By following the link from the first page to the AMR Web site, users would find a message by AMR's CEO with information similar to that found on United's opening page.

Differences also existed in the frequency with which information was released. By 1:00 p.m. United had issued press releases confirming the crash of both of its planes. The American and AMR sites also issued similar information, but in a single statement and in one press release.

Early on, United also established a menu of links to a press release page and a Fact Sheets page. By 1 p.m. the first day, the Fact Sheets featured general information about United's special assistance center, facts about the two types of aircraft involved in the incidents, and information about United's fleet. One interesting item found at the top of United's usual home page during the entire first day was a photo of the Taj Mahal with an airplane flying in the background. This image was removed by 9:00 a.m. on the second day, but no other graphic replaced the image until Mt. Rushmore appeared in that location by 10/19.

4.2. *Day two*

On the second day, both airlines further expanded their online response. Both airlines continued to feature a message by the companies' CEOs on the first page that users saw when they accessed the sites. By the morning of September 12, American added a link that connected users to its usual home page with links to areas such as flight information, the AMR corporate Web site, reservations, and frequent flyer information. By 1:00 that afternoon, the statement on American's site had been changed to feature an emphasis on sympathy, the dispatching of assistance teams, and a statement of thanks to individuals who had sent messages of support to the airline.

By 9:00 a.m. on September 12, United had added four new items to its press release page, representing a mix of operational and personal information. Information in the releases featured updates on flight status, including flights diverted the first day when all air traffic was grounded and a confirmation that the airline was making initial payments to the families of victims. Four more items were placed on the press release page by late in the afternoon. In addition to providing information about flights and assistance, United released a partial list of passengers and a full list of crew from its two flights that were involved in the attacks. Although each release tended to focus on a different central message, they also included an expression of sympathy from the CEO, assurances that assistance teams were being sent to work with relatives, and toll-free contact numbers.

United also added pertinent links from the Spanish language version of its site. Clicking on an incident link on the Spanish version home page took users to the English version of the CEO's message. Also featured were Spanish versions of the press release from 9/11 dealing

with the initial payment to victims' families, confirming the loss of two aircraft, the statement about sending assistance teams, and a message of sympathy from United's CEO. This was followed by the Spanish language version of the initial incident release from 9/11. The airline was also active in adding several items to its Fact Sheets page, including links to Web sites such as the FBI, Red Cross, government agencies, and Boeing, as well as a link to photos of United's fleet.

While United added eight new press releases between the end of the first day and 4:00 p.m. on the second day, American added only two new releases. One release that appeared prior to 9:00 a.m. dealt with assistance teams and included a message from the company CEO about the airline working with families. By the 1 p.m. hour, American had added another release with the list of crews and passengers from its two flights. The airline also added Spanish language versions of its original press releases from 9/11 and the new release from the morning of 9/12.

One feature unique to the American site was the addition on this day of two employee hotline messages from the company CEO. Based on the wording at the beginning of the statements, it appeared that the messages were originally recorded for phone access, but were then transcribed for posting on the Web site. By the 4 p.m. hour, one Web page on American's site included a message about the cancellation of flights until 9/13. Another page provided links to a list of diverted flights and the customer reaccommodation policy for individuals booked on flights from September 11 through 18. The AMR home page continued to feature the same message that appeared earlier in the day, but added a photograph of the company's CEO.

4.3. Day three

As with the previous two days, the opening page on United's site featured a message with the same basic content, except for an expanded statement about family assistance and sympathy. Also, the FBI's Web address was added for anyone who might provide information about the attacks.

By the third day following the incidents, United's Web information began to focus more on flight operations. For example, press releases issued by the 4:00 that afternoon provided updates on United's plan regarding resumption of flights and the airline's waiver policy about the postponement or cancellation of travel. This content was also evident on the special message page of the site. Additionally, more sympathy messages were added to United's Fact Sheets page. Due to the volume of condolences being posted, the messages were divided into several links. United also continued to provide updates on the Spanish language version of its Web site. Three new press releases featured the passenger and crew list, family assistance information, and estimated resumption of flight operations.

Meanwhile, American retained the opening statement from the CEO from the previous day, but also added a flight information link at the top of the page. Clicking on this link gave users a service resumption estimate with additional links to flight information. By selecting the information link, users were taken to a page with flight updates, American's reaccommodation policy, new travel restrictions, the American Airlines travel center, and frequent flyer information. A link was added to a page containing a general description of American's CARE assistance program. By 1:00 p.m., a new release focusing on flight service resumption was added. In addition, a link to a page containing messages of condolences that were sent to the

airline was added below the employee hotline links. Other changes on the American and AMR Web sites tended to be cosmetic. For example, the menu format on the flight information page changed so that links to information moved from the middle of the page to boxes at the top of the page with expanded information.

4.4. *Day four*

On September 14, the first page on United's site consisted of the same basic content as noted on the previous day, but with the addition of two links. One was a statement and link through which users could access information about what to expect at airports. The second link provided information about the resumption of flights. Both information pages were also featured as new press releases, thus offering connections to information from dual locations in the site.

The links from the Fact Sheets page remained the same for most of the day. However, the order of items was rearranged so that the link to contact numbers appeared first, followed by the list of links to the condolence messages. It is important to note that at some point before the 4 p.m. hour, the flight diversion link had been deleted from the Fact Sheets page, since airlines had been allowed to resume their operations.

Changes to the United site the remainder of the day primarily appeared to be edited versions of previously posted material rather than new information. Early in the afternoon, the statement on the opening page was reorganized. The focus here was on helping families and featured a link to a page with contact numbers for family and friends. By the 4:00 hour that afternoon, the lower portion of the page emphasized what travelers should know before they went to the airport, and the routes the airline was flying on that day along with a link to the flight operations press release from earlier in the day.

The opening page on American's Web site experienced no changes from the previous day. In fact, this page would contain the same CEO message as well as links to flight information and the AMR site through September 19. Additionally, the CEO statement and photo on AMR's home page remained the same through September 18. A new press release dealing with flight resumption and what to expect at the airport was added prior to the 9 p.m. hour. By 1:00 p.m., a Spanish language version of the press release about flight operations was added. Also added on this day was a new employee hotline message and more condolence messages to the existing messages.

4.5. *Day five*

An important change to the United site on this day was the deletion of the link to the toll-free phone numbers for families from the statement on the opening page. This corresponded to the removal of the link to the phone numbers page from the Fact Sheets. The only other additions to the company's incident pages were a press release with the names of passengers who were not listed on the previous passenger release and a link on the Fact Sheets page to a roster of United city ticket offices. By 1:00 p.m. that day, two more links to condolences messages were added to the Fact Sheets page.

While United appeared to be scaling back new information on its Web site, American added a new press release dealing with service plans for 9/15, along with information about unaccompanied minors, passenger reaccommodation, cargo service, and general advice for customers.

4.6. *Day six*

On September 16, it became apparent that the airlines were moving toward more normal operations and away from facts about the incidents. Sturges stated that, as a crisis subsides, messages shift from instructing to adjusting by helping the affected publics cope with the effects of the crisis.³² This phase was exemplified when both United and American added links to the Web sites of four relief organizations (Red Cross, NY Firefighters Fund, Salvation Army, and United Way). American's links to those organizations would remain on the site until at least 10/9 when the researchers completed gathering data for this study.

The shift in response phases is especially noteworthy in comparison with the instructing message by both airlines on September 11, when their publics were told to contact the FBI if they had information about the incidents. Now, their publics were provided a means to cope with the crisis by donating to the assistance organizations.

4.7. *Day seven*

By 1:00 p.m. on September 17, United had removed the "How you can help" section from its opening page (although it was added to the Facts Sheets page the next day) and replaced that section with a link to flight information and booking flights. One new item was added to the press release page about United's CEO visiting the Pennsylvania crash site, along with comments about paying tribute to victims of the crash. Of particular note in the release was an emphasis on the passengers as heroes, as well as statements about national values, endurance and compassion, and a message of thanks to agencies and officials who assisted in efforts related to the incidents.

American's Web site for this day primarily constituted operational information. This included expanded information about customer reaccommodation and refunds, and a statement about the indefinite closure of Reagan Airport in Washington, DC.

4.8. *Final online crisis communication*

As the airlines moved into the second week following the attacks, both Web sites began to experience significant changes, particularly the removal of incident information and a return to former Web page content and structure. A press release posted by 9:00 a.m. on September 18 on United's site indicated that the airline was deactivating its toll-free assistance numbers, since employees were in contact with family members. By 4:00 p.m. that day, the airline featured one press release about operating at full schedule, and another release dealing with revised procedures for unaccompanied minors and people needing assistance.

United's Fact Sheets page also experienced a number of changes on September 18. The airline deleted links to aircraft specifications, information about United's fleet, United's worldwide operations, and general guidelines for releasing a passenger list. Additionally, the "How you can help" section with links to the four relief organizations was now posted on the Fact Sheets page. On the links page, United deleted links to Boeing, Air Canada, Air New Zealand, the Air Transport Association, and photos of the airline's fleet, but added a link to the FAA. Changes to American's site on this day included updates to flight schedules and customer procedures.

The most significant change since the incident-related Web pages were established occurred on September 19 when both airlines removed the special Web page that had greeted visitors the previous eight days. Accessing United's or American's Web sites now took users to the airlines' usual Web pages. However, both airlines retained their CEOs' previous messages through a link on their home pages. Users accessing the message on United's site could then link to incident-related press releases and the Fact Sheets and Links pages. Similarly, visitors to American's site could view the CEO's message through a "Today's News" link on American's home page. Press releases were then accessible through a link on the CEO's message page.

A key step following a crisis is to identify corrective actions the organization is taking to assure the safety of its publics and to correct the problem.³³ This was exemplified in a number of communications that were posted to both United's and American's Web sites between September 18 and October 4. For American, this included a message on the AMR site from its CEO on September 19 dealing with new airline security measures and a press release on September 27 in which the airline indicated support for President Bush's safety initiatives. The site also included a link to a message from Congressman Pete Sessions about the safety measures. Finally, AMR posted a press release on October 2 focusing on securing cockpit doors. United also was involved in communicating security when the airline added a press release (dated September 21) about security screenings, check-in, baggage restrictions, and the increased number of air marshals. The end of the section included a statement about meeting FAA security requirements and emphasizing safety that exceeds government standards. In a message on September 28 (on its usual Press Room page), United also commended President Bush for the new airline security measures.

For the most part, site information during the final two weeks analyzed in this study dealt primarily with procedures and operations, and the posting of Spanish language versions of some previous press releases. By September 21, United had added its incident-related press releases to the list of releases on its usual Press Room page. Additionally, by September 25, the airline had added the links to condolences from the Fact Sheets section to its list of press releases in the Press Room.

Dealing with the results of the attacks was an important part of the two airlines crisis communication. On September 19, American announced that it would be reducing its staff. A similar message was posted by United on September 20. American stated that it would be reducing its meal service (9/20), providing separation pay in relation to the layoffs (9/27), and furloughing a large number of employees (9/28). Meanwhile, United posted statements about closing a number of its Red Carpet Clubs (9/19) and suspending cash dividends for investors (9/28).

By September 26, United had dismantled all pages directly connected to the 9/11 incidents, including the Links, Press Releases, and Fact Sheets; although users could still connect to its CEO's statement through a link at the top of United's home page. Information previously contained in those sections had been redistributed to other areas of its usual Web site. On September 28, the researchers noted that the Spanish language version of United's site had also dropped its link to information about the incidents. By October 4, the link to the CEO's message from the airline's home page was removed, thus returning United's Web site to normal structure.

Through September 28, American maintained the same basic format of its home page, but frequently updated travel and flight information and requirements to its flight information pages. The airline also retained the photo and message from its CEO on the AMR home page.

However, on October 3, it was noted that the link to the AMR press release page had been removed from the top of American's home page, although the releases could still be accessed through a menu item at the bottom of the page. By October 4 links were no longer available directly to incident information from American's home page.

5. Discussion

An analysis of United Airlines' and American Airlines' Web sites following the September 11 terrorist attacks revealed that the contents of the sites closely followed the three crisis response phases offered by Sturges.³⁴ As a crisis breaks out, Sturges proposed that organizations should provide instructing communication by stating how their publics should take action. For American and United, this involved three main types of information. The initial concern was providing basic facts about the incidents. A second issue was resumption of flights after the grounding of air traffic and providing new flight schedules online. Third, the airlines communicated new airport check-in procedures and generally prepared their customers for what to expect at airports.

Once the immediate impact of a crisis begins to wane, Sturges posited that organizations move into an adjusting communication phase.³⁵ Central to this phase is coping with the incident. The expressions of this phase on both airlines' Web sites were a series of condolence messages that were received from various publics and links to the Web sites of four relief organizations. Additionally, American directed adjusting communication to its employees by posting several messages from its CEO.

As a crisis abates, Sturges noted that organizations should return to internalizing content, which typically deals with creating a positive image of the company.³⁶ Because the present study focused primarily on the crisis itself rather than corporate consequences of the crisis, the third phase was not specifically examined. However, it should be noted that a number of issues were presented on the two airlines' Web sites at the end of the time period in this study, including information about employee layoffs, reduction in service, and financial problems.

How United Airlines and American Airlines used their Web sites following the events of September 11 is also noteworthy. Generally speaking, the sites of both airlines provided similar information to their diverse publics, including press releases, condolence messages, flight operations, and messages from the companies' CEOs. However, as noted in [Figs. 1 and 2](#), United offered more messages overall to its publics, especially within the first few days following the attacks. During the abatement of the crisis, the airlines either completely removed information from their incident-related sites or moved items from those pages to other parts of their usual Web sites (as represented on the figures by the large drop in the number of cumulative messages on certain dates). Six incident-related items remained on American's and AMR's Web sites at the time the researchers completed gathering data for this study.

Prior research of corporate Web sites by Esrock and Leichty found that companies provided little information to employees.³⁷ That finding was partially supported in the present study. While American featured several messages from its CEO to its employees, this study did not locate any messages to employees on the United site. This might be due to two possible reasons. First, the airlines might have a separate Web site or a corporate intranet that is available

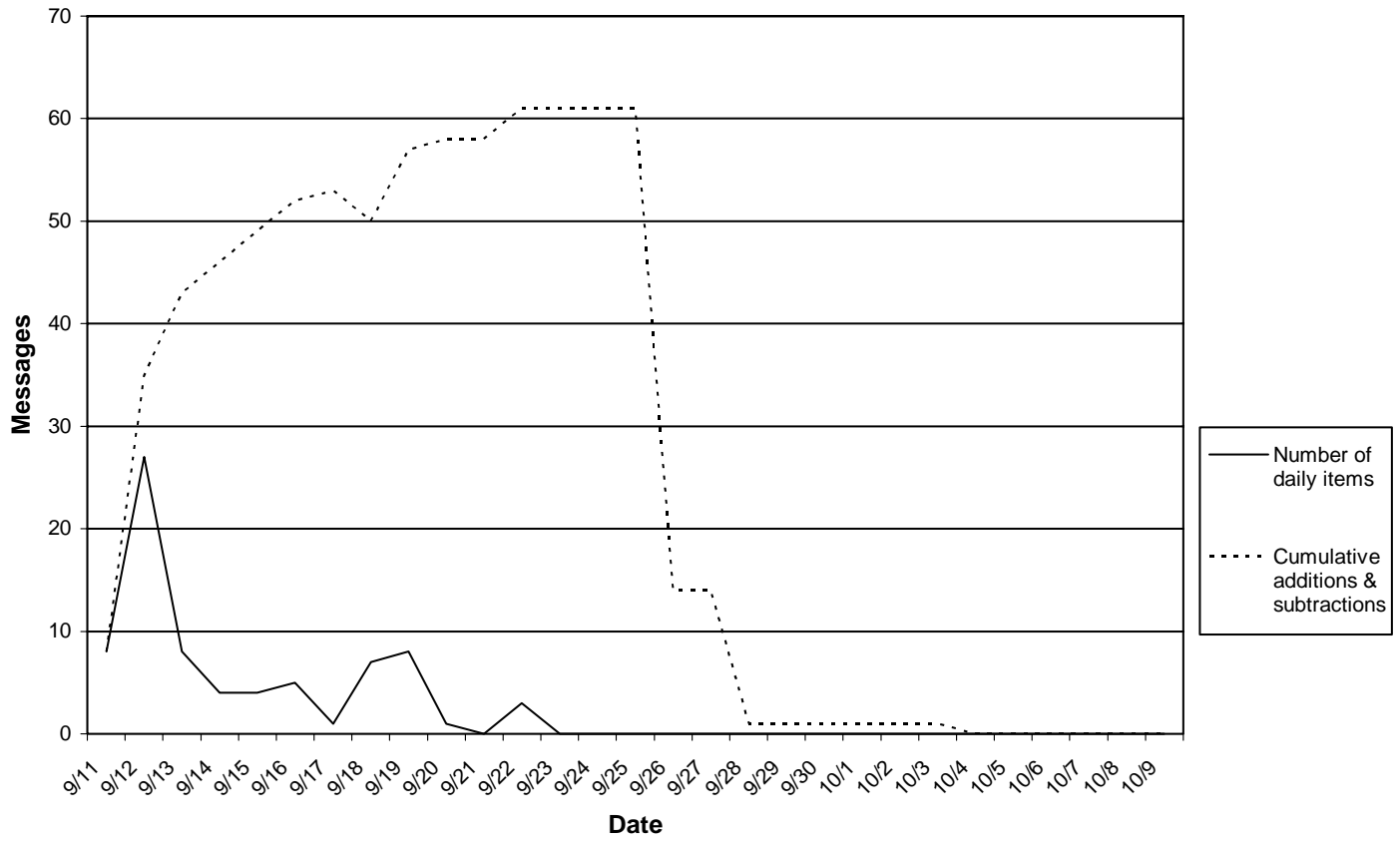


Fig. 1. United Airlines' online crisis communication following the terrorist attacks.

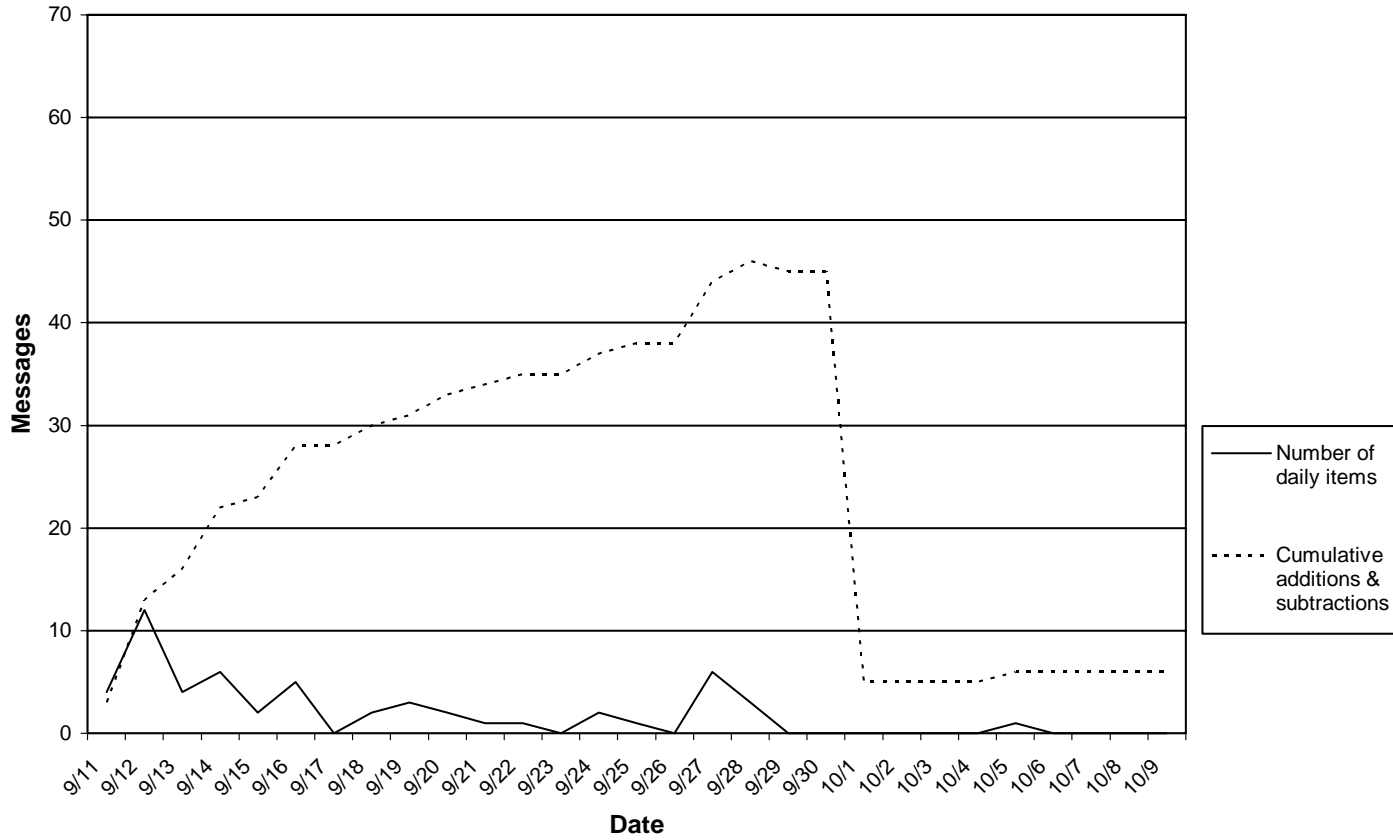


Fig. 2. American Airlines' online crisis communication following the terrorist attacks.

only to employees. Second, the companies may use multiple communications methods to maintain contact with their employees. Indeed, the employee hotline messages that appeared on American's site appeared to be transcriptions from a phone message system.

Another concern expressed in prior organizational Web research is the issue of interactivity. Aikat, and Esrock and Leichty found that companies they studied provided little interactivity through the Web with their publics.³⁸ The Web sites of the two airlines in the present study also seemed to be lacking in this area, particularly in relation to the incidents. However, this might be attributed to the potential for a communication overload for the airlines, given the extent of demands and available resources. At the same time, both airlines listed toll-free phone numbers as contact points for families and employees, as well as links to the FBI's Web site for people who might have information about the attacks.

Given the Web's capabilities for multimedia technologies, it would be expected that the airlines would utilize features such as audio or video, particularly with messages from the CEOs. However, neither American nor United offered audio or video on their sites. This parallels findings of prior research in that few companies use multimedia technologies on their Web sites.³⁹ Only still photos were available to some extent, primarily on United's site.

6. Conclusion

The Web sites of United Airlines and American Airlines, which typically offered items such as flight information, ticket purchases, and corporate information, were transformed following the attacks into a resource center for diverse publics that ranged from the media to family members of victims. Perhaps the greatest task was meeting the information needs of all those publics at the same time. Following this crisis, the Web enabled both companies to provide an immediate response to the attacks, to offer frequent updates about the flights, and to communicate their crisis process to various publics simultaneously. The extent to which the airlines were able to utilize more advanced Web technologies may have been a matter of staffing and allocation of resources, given the fact that the companies' online presence was one part of their crisis communication plan.

Some limitations to the present study should also be noted. First, the analysis of crisis communication response only included information posted to the airlines' Web sites. Additional research should compare the companies' Web sites with the use of other media, including broadcast and print news sources, as well as an analysis of press releases that were distributed following the events. Researchers might also want to examine how the airlines responded in industry publications. A second limitation is that this study only provides an overview of corporate messages. Future research should use content analysis or textual analysis to obtain a more detailed picture of crisis messages. This study also did not examine how the airlines' various publics responded to online communication. Studies should examine which publics accessed the airlines' Web sites during and after the crisis, and how those publics used the sites. Of specific concern here is whether the airlines' sites served as a primary or secondary source for important publics such as customers and the media.

References

- [1] P. St. John, *Air Piracy, Airport Security, & International Terrorism: Winning the War Against Hijackers*, Quorum Books, New York, 1991.
- [2] S. Emerson, B. Duffy, *The Fall of Pam Am 103: Inside the Lockerbie Investigation*, Putnam, New York, 1990.
- [3] S.J. Ray, *Strategic Communication in Crisis Management: Lessons from the Airline Industry*, Quorum Books, Westport, CT, 1999.
- [4] Ibid.
- [5] D.A. Fishman, ValuJet flight 592: crisis communication theory blended and extended, *Communication Quarterly* 47 (1999), pp. 345–375.
- [6] M. Saunders, Eastern's employee communication crisis: a case study, *Public Relations Review* 14 (1988), pp. 33–44.
- [7] W.L. Benoit, A. Czerwinski, A critical analysis of USAir's image repair discourse, *Business Communication Quarterly* 60 (1997), pp. 38–57.
- [8] M.K. Pinsdorf, Flying different skies: how cultures respond to airline disasters, *Public Relations Review* 17 (1991), pp. 37–56.
- [9] See for example, R.A. Barry, What to do when the roof falls in, *Business Marketing* 69 (1984), pp. 96, 98, 100; W.T. Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, Sage, Thousand Oaks, CA, 1999; R.L. Dilenschneider, R.C. Hyde, Crisis communications: planning for the unplanned, *Business Horizons* 28 (1985), pp. 35–38; D. Dougherty, *Crisis Communications: What Every Executive Needs to Know*, Walker and Company, New York, 1992; O. Lerbinger, *The Crisis Manager Facing Risk and Responsibility*, Lawrence Erlbaum, Mahwah, NJ, 1997.
- [10] W.T. Coombs, Ibid.
- [11] See for example, W.T. Coombs, Ibid; J.B. Kaufmann, I.F. Kesner, T.L. Hazen, The myth of full disclosure: a look at organizational communications during crisis, *Business Horizons* 37 (1994), pp. 29–39; M. Matros, Scandalous science, *Currents* 22 (1996), pp. 28–32; L. Tyler, Liability means never being able to say you're sorry: corporate guilt, legal constraints, and defensiveness in corporate communication, *Management Communication Quarterly* 11 (1997), pp. 51–73.
- [12] D.L. Sturges, Communicating through crisis: a strategy for organizational survival, *Management Communication Quarterly* 7 (1994), pp. 297–316.
- [13] W.T. Coombs, op. cit.
- [14] Ibid.
- [15] W.T. Coombs, Information and compassion in crisis response: a test of their effects, *Journal of Public Relations Research* 11 (1999), pp. 125–142.
- [16] W.T. Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, Sage, Thousand Oaks, CA, 1999.
- [17] M.L. Kent, M. Taylor, Building dialogic relationships through the World Wide Web, *Public Relations Review* 24 (1998), pp. 321–334.
- [18] D. Aikat, A new medium for organizational communication: analyzing Web content characteristics of Fortune 500 companies, *The Electronic Journal of Communication* 10 (2000) [Online: <http://www.cios.org/getfile/aikat.v10m1200>] (Accessed April 18, 2002); J. Croft, Airlines' Web portals prosper despite third-party sites, *Aviation Week & Space Technology* 154 (May 2001), p. 86; C. Liu, K.P. Arnett, L.M. Capella, R.C. Beatty, Web Sites of the Fortune 500 companies: facing customers through home pages, *Information & Management* 31 (1997), pp. 335–345; G.A. Marken, The Internet and the Web: the two-way public relations highway, *Public Relations Quarterly* 43 (1998), pp. 31–33.
- [19] S.L. Esrock, G.B. Leichty, Social responsibility and corporate Web pages: self-presentation or agenda-setting? *Public Relations Review* 24 (1998), pp. 305–319; S.L. Esrock, G.B. Leichty, Corporate World Wide Web pages: serving the news media and other publics, *Journalism & Mass Communication Quarterly* 76 (1999), pp. 456–467; E. Marlow, *Electronic Public Relations*, Wadsworth Publishing Company, Belmont, CA, 1996; P. Pharris, In online press kits, simplicity is key, *PR News* 56 (2000).
- [20] G.A. Marken, op. cit.

- [21] S.L. Esrock, G.B. Leichthy, Corporate World Wide Web pages: serving the news media and other publics, *Journalism & Mass Communication Quarterly* 76 (1999), pp. 456–467.
- [22] D. Aikat, op. cit.
- [23] S.L. Esrock, G.B. Leichthy, Social responsibility and corporate Web pages: self-presentation or agenda-setting? *Public Relations Review* 24 (1998), pp. 305–319.
- [24] S.L. Esrock, G.B. Leichthy, op. cit.
- [25] L.N. Hill, C. White, Public relations practitioners' perceptions of the World Wide Web as a communications tool, *Public Relations Review* 26 (2000), pp. 31–51.
- [26] W.T. Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, Sage, Thousand Oaks, CA, 1999.
- [27] J. Helperin, Crisis management is tough. Now imagine it in Internet time, *Business 2.0* (June 2001) [Online: <http://www.business2.com/articles/mag/print/0,1643,14858,FF.html>] (Accessed August 13, 2001).
- [28] P. Kiger, Lessons from a crisis: how communication kept a company together, *Workforce* 80 (2001 November), pp. 28–36.
- [29] Communications remain critical during national crisis, *PR News* 57 (September 2001); S. McLaughlin, Sept. 11: four views of crisis management, *The Public Relations Strategist* 8 (2002), pp. 22–28; P. Kiger, op. cit.
- [30] W.T. Coombs, op. cit.
- [31] D.L. Sturges, op. cit.
- [32] Ibid.
- [33] W.T. Coombs, *Ongoing Crisis Communication: Planning, Managing, and Responding*, Sage, Thousand Oaks, CA, 1999.
- [34] D.L. Sturges, op. cit.
- [35] Ibid.
- [36] Ibid.
- [37] S.L. Esrock, G.B. Leichthy, Corporate World Wide Web pages: serving the news media and other publics, *Journalism & Mass Communication Quarterly* 76 (1999), pp. 456–467.
- [38] D. Aikat, op. cit.; S.L. Esrock, G. Leichthy, Social responsibility and corporate Web pages: self-presentation or agenda-setting? *Public Relations Review* 24 (1998), pp. 305–319.
- [39] S.L. Esrock, G.B. Leichthy, op. cit.