Crisis Communication Strategies and Reputation Risk in the Online Social Media Environment

Venus Hosseinali-Mirza Nathalie de Marcellis-Warin

Polytechnique Montréal 2900, Edouard Montpetit Blvd. Montréal (Québec) Canada H3T 1J4 CIRANO, 1130 Sherbrooke Street West #1400 Montreal (Québec) Canada H3A 2M8

Thierry Warin

HEC Montréal 3000, Chemin de la Côte-Sainte-Catherine Montréal (Québec) Canada H3T 2A7

Abstract

This study explores crisis communication strategies in the online social media environment based on an in-depth analysis of eight social media crises from 2007 to 2011. The emergence and rapid expansion of social media request organizations to revisit their crisis communication strategies. Due to the nature of social media, earlier strategies are not entirely applicable to manage crises that originate from or amplified by information circulation in the social media channels. In social media age, crisis communication strategies must be redefined to properly respond to social media crises and to prevent undesirable outcomes. Our results reveal that each organization employs different crisis communication strategies that result in various outcomes. It was found that companies respond to social media crisis through both social media and traditional media and their response messages include apology and compensation. Some companies respond to social media crisis in a timely manner whereas others respond with delay. This article extends our understanding on how organizations respond to crises in the online social media environment to prevent undesirable outcomes.

Keywords: Social media; social media crisis; crisis communication strategy; crisis response; reputation risk

1. Introduction

The popularity and rapid expansion of social media call for organizations to take these new tools in to account in their assorted activities. In recent years, we have witnessed companies facing social media crises, like what happened in Québec (Canada) to Lassonde Industries Inc. in 2012. The story began in 2005, when Lassonde sued a small Québec-based soap company— Olivia's Oasis — for using the word "Oasis" as one of its product line's brand name. For seven years, Olivia's Oasis faced problems over this conflict, until finally on April 7, 2012, public support using online social media put an end to the battle. Following a news article from "LAPRESSE.CA" that the court had ruled in Lassonde's favor, a social media storm across Twitter and Facebook was released (Hamilton, 2012). Over 900 comments were posted to Lassonde's Facebook page and Twitter exploded with attacks on Lassonde. After receiving messages from customers to boycott its products, Lassonde took action and sent an executive to meet the owner of Olivia's Oasis with a promise to cover all her legal costs for the last seven years. Two days later, Jean Gattuso, Lassonde's president, wrote a post on his blog titled "Lassonde listens to its customers": "[...] This experience still held a silver lining: Lassonde has acknowledged the importance of consumer opinion. I thank you and I invite you to maintain this dialog with us" (Gattuso, 2012).

Social media are emerging as "hot topic" for crisis communication (Coombs, 2011a). Despite the popularity of social media and their significance in organizations' persistence, little is known about how companies approach crisis communication in the social media environment (Ki & Nekmat, 2014).

In order to address the research gap and to contribute to the growing literature of social media studies, this exploratory research investigates organizational crisis communication strategies in the social media environment through conducting a multiple case study research. The purpose of this study is to understand how organizations communicate with public in the event of a social media crisis by analyzing eight case studies that occurred or amplified through information dissemination in the social media platforms. Because of the significance and pervasiveness of social media in organizations persistence, this article aims at finding out communication strategies in the social media environment that result in crisis acceleration or attenuation. This article aims to answer the following question:

RO- How do organizations communicate and respond to social media crises to prevent undesirable outcomes?

The flow of the paper is as follows: First we begin with summarizing previous research on social media and crisis communication studies to put our contribution in to perspective. That section is followed by a description of research method, selected case studies, research analysis, and the results. Then, we conclude by implication for practitioners and research limitations that suggest avenues for further researches.

2. Background

The rise and rapid growth of social media has led to quick and open access to information for online users. As Veil, Sellnow and Petrun (2012) state social media are channels for a story to go viral in a short period of time; "share" on Facebook", "re-tweet" on Twitter, "email this video" on YouTube are options that offer online users the opportunity of information diffusion. Safko and Brake (2009, p. 6) define social media as "activities, practices and behaviors among communities of people who gather online to share information, knowledge, and opinions using conversational media". Kaplan and Haenlein (2010) categorize social media into (1) collaborative projects (e.g., Wikipedia), (2) blogs, (3) content communities (e.g., YouTube), (4) social networking sites (e.g., Facebook), (5) virtual game worlds (e.g., World of Warcraft) and (6) virtual social worlds (e.g., Second Life).

2.1. Social Media Crisis

The use of social media is a "double-edged sword". On one hand, its role in online dissemination of information can help an organization manage a crisis and on the other hand, it can create a crisis (Veil et al., 2012). A crisis is an unexpected event that creates high levels of uncertainty and threatens corporate main goals (Seeger, Sellnow & Ulmer, 2003). Coombs (2011b) defines crisis as significant threat to operations, which can possibly damage the company, its stakeholders and even an industry. The threats associated with crisis are "public safety", "financial loss" and "reputation loss" (Coombs, 2011b). The open access given by social media enables individuals to create and distribute all types of contents. In an organizational context, if viewership of these contents goes viral, spreading exponentially through social media, it could create a crisis (Veil et al., 2012). A crisis involving social media could originate from posting a video on YouTube, sharing a post on Facebook, tweeting on Twitter or writing a blog post. Owyang (2011) defines social media crisis as "an issue that arises in or is amplified by social media, and results in negative mainstream media coverage, a change in business process, or financial loss".

2.2. Crisis Communication Strategies and Social Media

In crisis communication procedure, organizations provide an explanation to public about what happened and offer a solution to the problem (Millar & Heath, 2003). Selecting the appropriate crisis response is a function of crisis origin (external or internal), crisis information form (e.g., Tweet) and crisis information source (Jin & Liu, 2010; Liu, Jin, Briones, & Kuch, 2012). Crisis response strategies are used to repair the reputation and to prevent more negative effects of the crisis (Coombs, 2007). Inappropriate communication and response strategies accelerate social media crises (Ott & Theunissen, 2014). Crisis impacts organization reputation and creates secondary reactions such as boycotting (Coombs, 2007; Dowling, 2002). Post-crisis communication strategies are used to repair reputational loss and prevent reputational damage (Coombs & Holladay, 2005).

During a crisis, social media can serve as a platform for online communication, acting as an informal communication channel through which personal or organizational information is conveyed, shared, and managed (Austin, Fisher Liu, &Jin, 2012). For instance, at the time of natural disaster social media often remain the only form of communication when all others fail (Bird, Ling, & Haynes, 2012). Social media provide emotional support after a crisis through enabling people to virtually stay connected, share information, and demand resolution (Chio & Lin, 2009). Social media users assign a higher level of credibility to social media coverage compare to traditional mass media crisis coverage (Sweetser & Metzgar, 2007; Procopio & Procopio, 2007). However, most public relation practitioners do not consider social media as a credible and accurate communication medium (Perry, Taylor, & Doerfel, 2003; Wright & Hinson, 2009).

2.3. Situational Crisis Communication Theory (SCCT)

Situational Crisis Communication Theory (SCCT) provides a framework for understanding how to maximize the reputational protection by crisis communication and identifies how key features of crisis situations impact attributions about the crisis and organizational reputation (Coombs, 2007). The model includes steps in reputational threats evaluation in crisis situations and propositions for crisis managers to determine which crisis response strategy to apply to increase reputational protection. Coombs (2007) classifies crisis response strategies as primary (attack the accuser, denial, scapegoat, excuse, justification, compensation, and apology) and secondary (reminder, ingratiation, and victimage).

SCCT model is not customized for social media context. The main focus on this study is to suggest a model that embraces social media crisis, social media crisis communication strategies, and social media crisis outcomes. In the next section, we present the research method and an inclusive description for each case study.

3. Research Method

Due to the novelty of social media studies, we investigate our research question using an exploratory qualitative method, as this approach is appropriate for new areas of research (Eisenhardt, 1989). The method is suitable in answering "how" or "why" research questions (Yin, 2009). We applied a multiple case study design that allows replication logic, in which each case aids to confirm or disconfirm the inferences drawn from the others (Yin, 2009). Table 1 presents the eight selected case studies.

	Company	Industry	Number of	Year of social media crisis
			employees	occurrence
1	Mattel	Toys and games	28.000	2011
2	GAP	Retail	137.000	2010
3	Nestlé	Food processing	339.000	2010
4	United Airlines	Airlines	87.000	2009
5	Domino's Pizza	Restaurants	220.000	2009
6	Motrin	Pharmaceuticals	126.500	2008
7	JetBlue Airways	Airlines	15.000+	2007
8	Taco Bell/KFC	Restaurants	175.000+	2007

Table 1: Case Studies Summary

In this research, we study the crisis communication strategies of eight companies with different sizes and industries. We have selected these cases because: the selected companies are large and known; the cases attracted media and public attentions at the time of their occurrence; the cases are mentioned in numerous online and offline news; different sources of data are available for these cases; and most importantly they exemplify social media potentials in creating crisis. We collected secondary data including online newspaper and magazine articles, online organization press releases, websites, online discussion forums and social media platforms (e.g., Facebook, Twitter, YouTube, and blogs) data.

4. Case Studies

In what follows we describe each of the social media crisis case studies in detail. This detailed explanation of each case is beneficial for the process of research analysis.

4.1. Mattel versus Greenpeace

On June 2011, a conflict between Mattel and Greenpeace moved into a social media combat. Greenpeace launched a global campaign against Mattel accusing the company to use packaging from Indonesian rainforest to wrap its toys.

Part of the campaign was an online video featured on YouTube which, according to Greenpeace, ten days after it was first uploaded in July 2011, was viewed over a million times in multiple languages. The video was about Ken breaking up with Barbie over rainforest destruction.

¹http://www.ethicalcorp.com/supply-chains/social-media-and-environmental-campaigning-brand-lessons-barbie

Greenpeace enabled its site visitors to share campaign information on Twitter and Facebook. The battle continued when activists started posting critical messages on Barbie's Facebook page. On Facebook, Mattel shut down commenting on the page and deleted any mention of rainforests. On Twitter—@BarbieStyle—Mattel was silent, whereas it normally featured ten or more tweets a day. Also it was revealed that @Barbie was not Mattel sponsored and that the organization had no control over it. Greenpeace set up @ken_talks for tweeting and putting more pressure on Mattel. On June 8, in a post on its corporate Facebook page, Mattel directly addressed the Greenpeace charges and announced that Mattel instructed its suppliers to avoid wood and paper from suppliers involved in deforestation allegations. The campaign continued for four months and eventually on October 2011, Greenpeace won the battle and, as a result, Mattel stopped doing business with Asia Pulp and Paper (APP). Mattel announced that, by the end of 2010, 70% of its paper packaging would be composed of recycled or sustainable materials and, by the end of 2015, it would increase to 85%.

4.2. GAP's New Logo

On October 2010, following a consumer backlash on Facebook and Twitter, Gap was forced to scrap an expensive new logo, days after its launch on www.gap.com website. The original Gap logo, showing the word "GAP" in capital letters inside a dark blue square, was replaced with a white square encasing a small blue square sitting over the letter "p" in "Gap". Unhappy consumers criticized Gap by commenting on its Facebook page and showing their disappointment about the new logo. They also set up a Twitter account in protest and a website named "Make your own Gap logo", provoking lots of mockery versions. Gap's official Facebook page was the main channel through which the company posted updates and responses to the criticism regarding the new logo. On Twitter page, Gap remained silent. Eventually, Marka Hansen, Gap North America president, informed that the company's marketing department acknowledged that the logo switch was a mistake and that the company would be postponing any changes for the future.

4.3. Nestlé versus Greenpeace

On March 17, 2010, Greenpeace launched an online campaign accusing Nestlé to buy palm oil for its popular chocolate bar Kit Kat from an Indonesian supplier –Sinar Mas – that clears vast areas of Indonesian forest for its plantations and destroys the natural habitat of the endangered orangutans. The campaign included a 60-second video of an office employee having a Kit Kat, which appeared to be a chocolate-covered ape finger. The video was uploaded on YouTube, and Nestlé asked YouTube to remove the clip, mentioning copyright concerns. Greenpeace re-posted the clip to Vimeo.com and used Twitter to spread the word about the attempted censorship. Many Web users also re-posted the clip to YouTube and other destinations on the Internet. Greenpeace encouraged its supporters to change their Facebook profile photos to anti-Nestlé slogans and co-opted logos and to attack Nestlé's Facebook page. Nestlé's Facebook team started threatening their Facebook fans to delete comments made by those using modified versions of their logo. Twitter users joined the conversation, encouraging people to visit Nestlé's Facebook comments. Negative Twitter comments appeared every 15 minutes. The backlash continued to grow until Nestlé backed down and apologized on Facebook for deleting posts and being rude. Eventually, Nestlé declared its commitment to using only "Certified Sustainable Palm Oil" by 2015 when, it said, sufficient quantities should be available.

4.4. United Airlines Breaks Guitars

On July 2009, Dave Carroll –a Canadian musician – created a protest song "United Breaks Guitars" after he found his \$3,500 guitar broken by United Airlines' baggage handler at Chicago Airport.

²http://latimesblogs.latimes.com/greenspace/2011/06/mattel-rainforest-greenpeace-social-media.html

³http://www.triplepundit.com/2011/10/mattel-greenpeace-app/

http://www.theguardian.com/media/2010/oct/12/gap-logo-redesign

⁵http://adage.com/article/news/gap-scrap-logo-return-design/146417/

⁶http://www.cnn.com/2010/WORLD/asiapcf/03/19/indonesia.rainforests.orangutan.nestle/index.html

⁷http://www.cnn.com/2010/WORLD/asiapcf/03/19/indonesia.rainforests.orangutan.nestle/index.html

⁸http://psamablog.blogspot.ca/2011/03/Nestlé-finds-out-hard-way-that-brands.html

⁹http://www.techguerilla.com/Nestlé-facebook-greenpeace-timeline-in-proces

¹⁰http://www.techguerilla.com/nestle-facebook-greenpeace-timeline-in-proces

¹¹ http://money.cnn.com/galleries/2011/technology/1104/gallery.social_media_controversies/2.html

¹² http://www.theglobeandmail.com/report-on-business/kit-kat-spat-goes-viral-despite-nestls-efforts/article1503795/?cmpid=1

The incident happened in the spring of 2008 and Dave communicated with United Airlines' customer service for nine months asking them to compensate for his loss.¹³ The airline refused to do so and he promised to write and produce three songs about his experience and release them online. The YouTube video was posted on July 6, 2009 and collected 150,000 views within one day. The video gathered over half a million hits by July 9, five million by mid-August 2009,10 million by February 2011, and 13.3 million by September 2013.¹⁴United's Managing Director of Customer Solutions telephoned Carroll to apologize and United offered Carroll \$1,200 in flight vouchers, which he declined. The UK Daily Mail claimed that, as a result of this event, United lost 10% of its share value, or \$180 million.¹⁵The causality of this loss was intensely disputed on the Internet.

4.5. Domino's Pizza YouTube Video

On April 15, 2009, two employees at Domino's Pizza in Conover (NC) created videos showing a male sticking cheese up his nose and then putting it on a sandwich that was to be delivered to a customer. His colleague also filmed him partaking in other unsanitary acts with the food and uploaded the videos to YouTube. ¹⁶ The video went viral as, on the same day (9:30 p.m.), it had 930,390 views combined with all the comments on Twitter. ¹⁷At first, Domino's decided to do nothing publicly not to attract more attention, but the viewership of the video continued to grow. Domino's contacted YouTube and was successful in removing the original video, but numerous sites had already downloaded and reposted the video. ¹⁸ Domino's fired the two employees and the franchise owner discarded all open containers of food and sanitized the location. Domino's uploaded a two-minute video apology from the company USA President, Patrick Doyle, and posted it where the whole story started – on YouTube. ¹⁹ Eventually, Domino's activated a Twitter account two weeks earlier than planned to answer the dialogue about the incident. The company also promised to review its hiring practices. ²⁰

4.6. Motrin Advertisement

On November 16, 2008, Johnson & Johnson's online advertisement on Motrin's website caused a backlash from moms. The ad –available online and in printed version–was about baby wearing, suggesting that moms wear their babies to be fashionable and thus not practical. Online moms seemed to be offended by the idea that carrying their babies was "fashionable". On the same evening, this subject was the most tweeted on Twitter. The day after, there was a nine-minute video on YouTube, showing screen shots of the twitter posts with photos of moms carrying their babies in slings, and bloggers also began calling for boycott. At that time, neither Motrin nor McNeil Consumer Healthcare, which was responsible for the Motrin brand, had a representative present in social media. Motrin took the advertisement down from its website the night of November 17 and sent an apology email to some of the bloggers who campaigned to protest against the ad. Also, another apology note was posted on Motrin's website from the Vice-President of Marketing of McNeil Consumer. On the vice-President of Marketing of McNeil Consumer.

4.7. JetBlue Valentine's Day Flight

On Valentine's Day, February 14, 2007, a bad winter storm caused JetBlue passengers to spend as many as 11 hours trapped on planes in New York.

Because of the storm, passengers of the airline experienced delayed and cancelled flights, but JetBlue thought it would be able to fly and did not cancel its flights.

¹³http://www.flightwisdom.com/2010/03/02/the-united-breaks-guitars-trilogy-comes-to-an-end/

¹⁴http://en.wikipedia.org/wiki/United_Breaks_Guitars#cite_note-davecarrollmusic1-9

¹⁵http://www.dailymail.co.uk/news/article-1201671/Singer-Dave-Carroll-pens-YouTube-hit-United-Airlines-breaks-guitar-shares-plunge-10.html

¹⁶http://www.prsa.org/Intelligence/TheStrategist/Articles/view/8226/102/Domino_s_delivers_during_crisis_The_company_s _step#.U9FpD4BdVbw

¹⁷ http://www.webpronews.com/dominos-pizza-deals-with-youtube-nightmare-2009-04

¹⁸http://www.goodasyou.org/good_as_you/2009/04/video-let-the-dominoes-appall.html

¹⁹http://www.sfgate.com/business/article/How-Domino-s-responded-to-prank-video-3163363.php

²⁰http://www.sfgate.com/business/article/How-Domino-s-responded-to-prank-video-3163363.php

²¹http://adage.com/article/digital/twittering-critics-brought-motrin-mom-campaign/132622/

²²http://parenting.blogs.nytimes.com/2008/11/17/moms-and-

motrin/?_php=true&_type=blogs&_php=true&_type=blogs&_r=1

²³http://bloombergmarketing.blogs.com/bloomberg_marketing/2008/11/update-11-18-08.html

Passengers were on their cellular phones and, as a result, horror stories of overflowing toilets, hungry and thirsty passengers and a non-responsive airline quickly spread via mass media, Internet blogs, and YouTube videos.²⁴ As a response to the social media crisis, JetBlue's founder and CEO, David Neeleman, explained what went wrong and how he would solve the problem on almost all major network morning shows and cable news networks.²⁵JetBlue also uploaded the CEO's apology video on YouTube. The airline offered a full refund and a round-trip ticket to all customers whose flights had been delayed for more than three hours. The CEO also announced a \$30 million investment to restore the procedures in customer service and to launch a customer "bill of rights".

4.8. Taco Bell/KFC rats in Kitchen

On February 23, 2007, a pack of a dozen rats scurrying around a KFC/Taco Bell restaurant in New York City's Greenwich Village was shown on a morning television talk show. KFC and Taco Bell are owned by Yum! Brands. A New York station, WNBC-TV, made the report following a consumer call. By the same day, more than 1,000 blogs had cited or spread the story and footage, and a search on Google News for "rats and KFC" yielded 443 stories. The video of rats running around the restaurant was posted to YouTube and, soon after, duplicated and versions started multiplying. To date, these videos have been viewed more than 1.6 million times. In response, Yum! Brands Inc. issued an official statement which was placed on the press pages in the company-information menus, and consumers could hardly find that information. The statement described the incident as an isolated occurrence and mentioned that the restaurant would not reopen until it had been sanitized and given a clean bill of health.

5. Analysis

For the purpose of data analysis, we conducted an in-depth descriptive examination for each case study. The focus rested on how the crisis emerged, how each company responded and what was the outcome. The analysis was made in three sections. First, we investigated the components of social media crisis. In social media environment, occurring an event could create a crisis. The related information diffuses among social media channels and if it goes viral, crisis will happen. For the analysis of social media crisis, we investigate: origin of crisis, reason for crisis, and channels of information diffusion. Next, we explored crisis communication strategies for each case. For this purpose, the focus was on the crisis response and the timeframe in which the company responded to the crisis and which channels of communication were employed. Therefore, the three phases in analyzing crisis communication strategies are: crisis response timing; crisis response channel, and crisis response. Ultimately and to complete our data analysis, we examined the probable outcomes of social media crisis on each company.

5.1. Social Media crisis

In this section we review each case study based on its origin of occurrence, reason for occurrence and channel of information diffusion. Table 2 shows the origin of occurrence for each crisis. In two cases, a NGO (Greenpeace) originated the crisis; in one case employees were crisis originator; in one other case, crisis commenced by a T.V. report; in three cases, customers initiated the crisis; and in last case, company' Facebook fans including customers and non-customers started the social media crisis.

1.

²⁴http://jon8332.typepad.com/force_for_good/2007/02/recovering_from.html

²⁵http://www.imediaconnection.com/content/14452.asp

²⁶http://money.cnn.com/2007/02/23/news/companies/taco_bell/

²⁷http://adage.com/article/news/taco-hell-rodent-video-signals-era-pr-crises/115184/

²⁸http://adage.com/article/news/taco-hell-rodent-video-signals-era-pr-crises/115184/

²⁹http://www.nytimes.com/2007/02/25/nyregion/25rats.html

Table 2: Origins of Crisis

	Company	Origin of crisis
1	Mattel	NGO
2	GAP	Facebook fans
3	Nestlé	NGO
4	United Airlines	Customers
5	Domino's Pizza	Employees
6	Motrin	Customers
7	JetBlue Airways	Customers
8	Taco Bell/KFC	Journalist T.V. report

Table 3 demonstrates the reason for each crisis occurrence. Reasons are various including company wrongdoing, a supplier mistake or even no mistake. For instance in GAP case, the reason for crisis happening was that the company launched a new logo. This case is similar to Motrin case that the crisis happened because of company new advertisement on one of its products. In these two cases, an event created a crisis without any misdeed. In Nestlé and Mattel cases, a third party (supplier) wrongdoing (deforestation act) caused a NGO (Greenpeace) initiates the crisis. In United Airlines, JetBlue Airways, and Taco Bell/KFC, company misdeed resulted in crisis occurrence. And in Domino's Pizza case, employees created the crisis purposefully.

Table 3: Reasons for Crisis

	Company	Reason for crisis
1	Mattel	Supplier deforestation act
2	GAP	Company launch of a new logo
3	Nestlé	Supplier deforestation act
4	United Airlines	Company customer service
5	Domino's Pizza	Employees' prank video
6	Motrin	Company new advertisement
7	JetBlue Airways	Company decision failure
8	Taco Bell/KFC	Company hygienic issue

Table 4 represents the channels of information diffusion through which information about the event disseminated, went viral and created the crisis. In all cases, mutual effect of social media and traditional media (such as T.V. and newspapers) caused the acceleration of information diffusion. In some cases, crisis information disseminated across social media channels first and then followed by other media. In Nestlé case, for instance, Green peace's success was created by social media activities, which were followed by specialist media such as GreenBiz and TreeHugger, as well as mainstream media, such as the Guardian and newswires like Reuters (The Guardian, 2010). The significance of social media and traditional media channels in crisis information dissemination differs among cases. For example, in Mattel case, Greenpeace launched an online campaign by releasing a YouTube video in which Ken discovers Barbie's deforestation habits in Indonesia and dramatically ends their relationship. Greenpeace's main move was its use of Facebook and Twitter to join the public in its campaign (Stine, 2011). Other media then followed the story and disseminated the crisis information.

Table 4: Channels of Information Diffusion

	Company	Channels of information diffusion		
		Social media	Traditional media (examples)	
1	Mattel	YouTube and Facebook	Los Angeles Times, Huffington Post	
2	GAP	Facebook, Twitter, and blogs	Times, Forbes	
3	Nestlé	YouTube, Facebook, and Twitter	Economist, The Guardian, Wall Street Journal	
4	United Airlines	YouTube, Facebook, Twitter, and blogs	BBC News, The Guardian	
5	Domino's Pizza	YouTube	BusinessWeek, The New York Times	
6	Motrin	YouTube, Twitter, and blogs	USA Today, The New York Times, The	
			Washington Post	
7	JetBlue Airways	YouTube and blogs	The New York Times, BusinessWeek	
8	Taco Bell/KFC	YouTube and blogs	The New York Times, CNN Money	

In all cases except Taco Bell/KFC, the diffusion of information began in social media channels and then other media picked up the story and enhanced information circulation. In Taco Bell/KFC, the event information first launched on T.V. and then disseminated through social media. However, in all cases both social media and traditional media are involved, bolstering each other in information diffusion during crisis.

5.2. Crisis Communication Strategies

One of the characteristics of social media channels is the speed with which information circulates among these channels and reaches to the large number of audiences. It is organization choice to respond to the crisis immediately or with delay. Table 5 represents the companies timing in addressing the crisis. Five companies responded to crisis with delay and three of them immediately addressed the social media crisis. Each company had a reason for its late or immediate reaction to crisis. For example, Domino's Pizza did not want to attract more attention to the YouTube video and therefore, the company waited 48 hours before addressing the crisis and as a result, the YouTube video received nearly 1 million views before it was taken down (York, 2009).

Crisis response timing **Company Immediate Delayed** Mattel \square 2 **GAP** \square 3 Nestlé $\overline{\mathbf{V}}$ 4 **United Airlines** $\overline{\mathbf{A}}$ Domino's Pizza \square 5 6 Motrin $\overline{\mathbf{A}}$ 7 JetBlue Airways \mathbf{V} 8 Taco Bell/KFC $\overline{\mathbf{V}}$

Table 5: Crisis Response Timing

Table 6 exhibits the media through which the companies responded to the crisis and communicated with the crisis audiences. Four out of eight companies addressed the crisis using both social media and non-social media channels; for instance, Nestlé's response was through its Facebook page and also its official website. Two other companies responded only through non-social media channels and Domino's Pizza addressed the social media crisis by employing two different social media channels.

	Company	Crisis response channels	
		Social media channels	Traditional and other media channels
1	Mattel	Facebook	Reuters
2	GAP	Facebook	Huffington Post
3	Nestlé	Facebook	Nestlé's website
4	United Airlines	-	Phone call
5	Domino's Pizza	YouTube and Twitter	-
6	Motrin	-	Email and Motrin's website
7	JetBlue Airways	YouTube	National TV channels
8	Taco Bell/KFC	-	Yum! Brands' website

Table 6: Crisis Response Channels

Table 7 points out the crisis response strategies applied by the companies. Three companies tried to censor the crisis information, five companies apologized for the crisis happening and all eight companies applied compensation strategy.

Company Crisis responses Censorship **Apology** Compensation $\overline{\mathbf{A}}$ $\overline{\mathbf{Q}}$ 1 Mattel **GAP** $\sqrt{}$ 2 $\overline{\mathbf{A}}$ $\overline{\mathbf{A}}$ 3 Nestlé $\overline{\mathbf{A}}$ \square \square 4 **United Airlines** Domino's Pizza $\sqrt{}$ $\overline{\mathbf{A}}$ $\overline{\mathbf{M}}$ 5 Motrin $\overline{\mathbf{A}}$ $\overline{\mathbf{Q}}$ 6 JetBlue Airways $\overline{\mathbf{A}}$ \square Taco Bell/KFC $\overline{\Omega}$ $\overline{\mathbf{A}}$ 8

Table 7: Crisis Responses

Appendix I includes detailed explanation about each company crisis response choices.

5.3. Crisis Outcomes

Based on the available data, social media crisis result in a variety of outcomes such as: negative impact on reputation, image, and brand value. It also results in call for boycott and financial concerns. Table 8 shows the outcomes of social media crisis for each company based on secondary data analysis. Two companies faced with customers call for boycott, six companies experienced negative impact on their reputation, two companies challenged negative impact on their brand value and eventually five companies confronted negative financial results. Appendix II represents detailed descriptions on the outcomes of social media crises for each company.

	Company	Call	Negative impact on	Negative impact on	Negative
		for boycott	reputation	brand value	financial impact
1	Mattel		$\overline{\checkmark}$		
2	GAP				
3	Nestlé				\square
4	United Airlines				\square
5	Domino's Pizza				\square
6	Motrin				
7	JetBlue Airways				\square
8	Taco Bell/KFC	V	V		Ø

Table 8: Crisis Outcomes

In what follows, we present the results of the study and propose our social media crisis communication model. We then conclude by discussing the research implications and venues for further studies.

6. Findings

In this paper, we studied companies' communication strategies in response to social media crisis. The research units of analysis were companies that faced a crisis in the social media environment, in which the event information was disseminated and went viral through social media channels and created a crisis. We selected eight companies, which varied in their sizes and industries. This exploratory study examined its research question using a multiple case study research method.

The research question was: How do organizations communicate and respond to social media crises to prevent reputation risk? To address this question, we first investigated social media crises based on origin and reason for crisis and channels of information diffusion. We found out that social media crisis could originate from different sources, such as: stakeholders, other companies, and mainstream media. The reason for social media crisis also varies. It could be because of organization misdeed or stakeholders' wrongdoing. In social media environment, even if there is no mistake or misdeed, a crisis could occur. Channels through which the information disseminates are both social media, traditional and other media. Social media channels cause information goes viral and creates crisis. Traditional and other media strengthen and support information diffusion but social media crisis mainly appears by information diffusion in social media websites.

Next, we examined crisis communication strategies in terms of crisis response timing, channels, and messages. We found out that the majority of companies respond to social media crisis with significant delay because of different reasons. For instance, Domino's Pizza didn't want to attract more attention to the case and because of this reason, the company waited 48 hours before addressing the crisis. Regarding crisis response channel, we found out that the majority of companies used both social media and traditional media in order to address the social media crisis. Concerning crisis response strategy, all companies applied compensation messages, and the majority of them apologized. However, some companies tried to stop the diffusion of more information or tried to censer it. This added to the diffusion of crisis information. Regarding the social media crisis outcomes, we found variety of outcomes such as: negative impact on reputation and brand value, call for boycott, and negative financial outcomes. The negative financial impacts of social media crisis were temporary and minor. Based on the available news and reports on the crises, the main impact was on companies' reputation

Based on the research findings, we suggest a model of social media crisis communication (Figure 1) in terms of social media crisis, crisis communication strategies, and crisis outcomes. As shown in the model, social media crisis is created out of an event because of viral diffusion of information in social media channels. The diffusion of information in social media channels is supported and amplified by traditional and other media. When social media crisis happens, based on its origin, reason of happening, and channel of information diffusion, the company needs to address the crisis. The crisis communication strategies include crisis response timing that could be an immediate or late response; crisis response channels that are social media or traditional media; and crisis responses, which are apology and compensation.

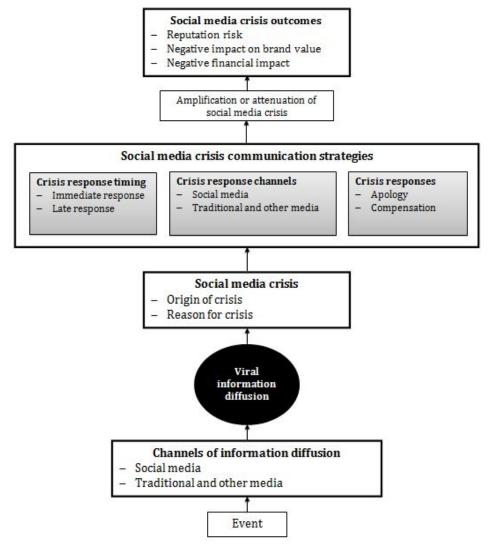


Figure 1: Social Media Crisis Communication Model

In social media environment, companies are able to censer the information but we did not consider this act as a response message, so it is not included in the model. Crisis communication strategies could result in amplification or attenuation of crisis. If the company applies appropriate strategies, the crisis attenuates, otherwise it amplifies and the situation becomes worse. As shown in the model, the social media crisis puts company reputation in to danger. Reputation risk is one crucial outcomes of social media crisis.

7. Discussion and Conclusion

This research explored organizations' crisis communication strategies in the social media environment. Organizations apply apology and compensation response strategies to communicate with crisis audiences in the social media environment. Findings indicate that the social media crisis impacts the organization's reputation, brand, and financial status. It also causes secondary crisis impacts, such as call for boycott. The speed of information dissemination through social media channels causes the crisis impact to appear fast and therefore, organizations need to have suitable social media crisis communication strategies based on social media requirements. One important requirement of social media is the speed of information circulation, which urges organizations to address the crisis in a timely manner.

Social media crises could happen for all organizations regardless of their social media employment and engagement. For example in Motrin case, the company had no social media presence at the time of crisis and therefore it could not communicate with audiences through social media channels. It is beneficial for companies to be present in social media environment and monitor the conversations about them frequently and get prepared to respond to possible crises using appropriate communication channels.

Social media has the capability of making information goes viral. Because of this, if the information about any event goes viral, it could result in a crisis. Individuals or other organizations (e.g., competitors) might take advantage of this social media capability and cause a social media crisis. Companies must be present in social media environment, monitor the conversation, and be responsive in proper time. For social media crisis communication purposes, companies need to carefully consider the channel of crisis response and the time of responding. Apart from traditional crisis response messages, companies need to be more attentive about speed and channel of crisis responses in social media environment.

We conclude by emphasizing on two key findings of this research. First, because of social media nature, if the information about any event disseminates among social media channels and goes viral, crisis could appear. Traditional or other media do not have similar function to diffuse information to numerous audiences in a short time. Second, companies need to carefully consider social media crisis qualifications, and respond to them with customized strategies that fit social media crisis requirements.

8. Limitations and Future Research

Like any research, this study suffers from several limitations, which can be used as a guide for future research. First, because of the qualitative nature of the study, findings are considered exploratory and therefore they might not be applicable to all situations. Second, this study only relied on secondary online data and did not investigate the social media platforms of the organizations in the real time of crisis occurrence. Future studies could extend investigations to all social media websites of companies to examine the social media communication strategies in crisis responses and conversations. Third, part of our data could be lost or altered because companies are able to delete or modify the contents of their social media pages. Fourth, the study did not determine the separate contribution of social media and traditional media in information dissemination, which resulted in crisis creation. Future studies might determine each media segments in information diffusion to understand the share of each (social media and traditional media) in creating the social media crisis. Further studies might also explore the duration of social media crisis consequences and the strategies for post-crisis communication purposes. Furthermore, determination of channels companies employ to deliver post-crisis messages to crisis audiences to address the reputation damage could be of interest.

References

- Austin, L., Fisher Liu, B., & Jin, Y. (2012). How audiences seek out crisis information: Exploring the social-mediated crisis communication model. Journal of Applied Communication Research, 40(2), 188-207.
- Bird, D., Ling, M., & Haynes, K. (2012). Flooding Facebook-the use of social media during the Queensland and Victorian floods. Australian Journal of Emergency Management, The, 27(1), 27.
- Choi, Y., & Lin, Y. H. (2009). Consumer responses to Mattel product recalls posted on online bulletin boards: Exploring two types of emotion. Journal of Public Relations Research, 21(2), 198-207.
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. Corporate Reputation Review, 10(3), 163-176.
- Coombs, W. T. (6 January 2011a). Crisis communication and social media. Institute for Public Relations. Retrieved from http://www.instituteforpr.org/crisis-communication-and-social-media/
- Coombs, W. T. (2011b). Ongoing crisis communication: Planning, managing, and responding. Sage Publications.
- Coombs, W. T., & Holladay, S. J. (2005). An exploratory study of stakeholder emotions: Affect and crises. Research on Emotion in Organizations, 1, 263-280.
- Dowling, G. (2002). Creating Corporate Reputations: Identity, Image and Performance: Identity, Image and Performance. Oxford University Press.
- Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532-550.
- Gattuso, J. (9 April 2012). Lassonde listens to its customers [blog post]. Retrieved from http://www.lassonde.com/en/blog/lassonde-listens-to-its-customers/
- Hamilton, G. (9 April 2012). Quebec juice maker pays opponent's legal fees after soap ruling gets Twitter in a lather. NATIONAL POST NEWS. Retrieved from http://news.nationalpost.com/2012/04/09/quebec-juice-maker-pays-opponentslegal-fees-after-soap-ruling-gets-twitter-in-a-lather/
- Jin, Y., & Liu, B. F. (2010). The blog-mediated crisis communication model: Recommendations for responding to influential external blogs. Journal of Public Relations Research, 22(4), 429-455.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. Business Horizons, 53(1), 59-68.
- Ki, E. J., & Nekmat, E. (2014). Situational crisis communication and interactivity: Usage and effectiveness of Facebook for crisis management by Fortune 500 companies. Computers in Human Behavior, 35, 140-147.
- Liu, B. F., Jin, Y., Briones, R., & Kuch, B. (2012). Managing turbulence in the blogosphere: Evaluating the blog-mediated crisis communication model with the American Red Cross. Journal of Public Relations Research, 24(4), 353-370.
- Millar, D. P., & Heath, R. L. (Eds.). (2003). Responding to crisis: A rhetorical approach to crisis communication. Routledge.
- Ott, L., & Theunissen, P. (2014). Reputations at risk: Engagement during social media crises. Public Relations Review. doi:10.1016/j.pubrev.2014.10.015
- Owyang, J. (13 August 2011). (Report) Social Media Crises On Rise: Be Prepared by Climbing the Social Business Hierarchy of Needs [blog post]. Retrieved from http://www.web-strategist.com/blog/2011/08/31/report-socialmedia-crises-on-rise-be-prepared-by-climbing-the-social-business-hierarchy-of-needs/
- Perry, D. C., Taylor, M., & Doerfel, M. L. (2003). Internet-based communication in crisis management. Management Communication Quarterly, 17(2), 206-232.
- Procopio, C. H., & Procopio, S. T. (2007). Do you know what it means to miss New Orleans? Internet communication, geographic community, and social capital in crisis. Journal of Applied Communication Research, 35(1), 67-87.
- Safko, L., & Brake, D. K. (2009). The Social Media Bible-Tactics. Tools & for Business Success. Hoboken, New Jersey.
- Seeger, M. W., Sellnow, T. L., & Ulmer, R. R. (2003). Communication and organizational crisis. Greenwood Publishing
- Stine, R. (5 August 2011). Social media and environmental campaigning: Brand lessons from Barbie. Ethical CORPORATION. Retrieved from http://www.ethicalcorp.com/supply-chains/social-media-and-environmental- campaigning-brand-lessons-barbie
- Sweetser, K. D., & Metzgar, E. (2007). Communicating during crisis: Use of blogs as a relationship management tool. Public Relations Review, 33(3), 340-342.
- The Guardian (27 October 2010). Lessons from the palm oil showdown. The Guardian. Retrieved from http://www.theguardian.com/sustainable-business/palm-oil-greenpeace-social-media
- Veil, S. R., Sellnow, T. L., & Petrun, E. L. (2012). Hoaxes and the Paradoxical Challenges of Restoring Legitimacy Dominos' Response to Its YouTube Crisis. Management Communication Quarterly, 26(2), 322-345.
- Wright, D. K., & Hinson, M. D. (2009). An updated look at the impact of social media on public relations practice. Public Relations Journal, 3(2), 1-27.
- Yin, R. K. (2009). Case study research: Design and methods. Sage publications.
- York, E.B. (20 April 2009). What Domino's Did Right and Wrong in Squelching Hubbub over YouTube Video. Advertising Age. Retrieved from http://adage.com/article/news/crisis-pr-assessing-domino-s-reaction-youtube-hubub/136086/

Appendix I- Crisis communication strategies with examples

	Company	Crisis communication strategies	Example
1	Mattel	Censorship	 Because of hundreds of comments on Barbie's Facebook page, Mattel shut off comments for days and deleted any mention of rainforests.³⁰ As part of Greenpeace's Barbie campaign, Greenpeace USA ran satirical Facebook ads and received a notice that the ads were being removed due to a third-party complaint on trademark infringement. This complaint to Facebook was an attempt to stop Greenpeace's campaign.³¹
		Compensation	- The day after Greenpeace launched the campaign, Mattel published a press release stating that it had commanded its suppliers to no longer source from APP. ³² ³³ [] "We view sustainability as an investment in the current and future generations on whom our business focuses. Our strategic approach to sustainability, "Re-imagine the way we play", inspires the company to make continuous improvement through our three related platforms [] Our Sustainable Sourcing Principles for the procurement of packaging and product comprised of paper or wood fiber support all three of these platforms by establishing a commitment to diligently improve how we conserve these resources, advance our responsible sourcing practices, and seek to encourage our supply chain partners to do the same." ³⁴
2	GAP	Compensation	- Answering to the public backlash against GAP's new logo, the president of North America Gap Brand, Marka Hansen, released the following statement: "At Gap brand, our customers have always come first. We've been listening to and watching all of the comments this past week. We heard them say over and over again they are passionate about our blue box logo, and they want it back. So we've made the decision to do just that, we will bring it back across all channels [] we've learned a lot in this process. And we are clear that we did not go about this in the right way. We recognize that we missed the opportunity to engage with the online community. This wasn't the right project at the right time for crowd sourcing. There may be a time to evolve our logo, but if and when that time comes, we'll handle it in a different way." 35
3	Nestlé	Censorship	 Nestlé censored the YouTube video claiming a copyright complaint.³⁶ Greenpeace supporters were encouraged to change their Facebook profile photos to anti-Nestlé slogans and posted them to the Nestlé fan page. Nestlé countered with a mild threat: "To repeat: we welcome your comments, but please don't post using an altered version of any of our logos as your profile picture – they will be deleted."³⁷
		Apology	- The backlash continued to grow over the next few hours, until the Nestlé representative finally backed down: "This was one in a series of mistakes for which I would like to apologize. And for being rude. We've stopped deleting posts, and I have stopped being rude."

³⁰http://www.ethicalcorp.com/supply-chains/social-media-and-environmental-campaigning-brand-lessons-barbie

³¹ http://www.greenpeace.org/usa/en/news-and-blogs/campaign-blog/online-campaign-against-mattel-silenced-by-gu/blog/35241/

³²http://www.ethicalcorp.com/supply-chains/social-media-and-environmental-campaigning-brand-lessons-barbie

³³ https://secure3.convio.net/gpeace/site/Advocacy?page=UserActionInactive&id=855

³⁴ http://corporate.mattel.com/about-us/playingresponsibly/

³⁵ http://adage.com/article/news/gap-scrap-logo-return-design/146417/

³⁶http://www.greenpeace.org.uk/blog/forests/nestle-censor-our-advert-and-get-it-pulled-youtube-20100317

³⁷ http://www.cnet.com/news/nestle-mess-shows-sticky-side-of-facebook-pages/

³⁸ http://money.cnn.com/galleries/2011/technology/1104/gallery.social_media_controversies/2.html

		Compensation	- Nestlé developed a plan to identify and remove from its supply chain
			any company – including Sinar Mas – with links to deforestation. ³⁹
4	United Airlines	Apology Compensation	- United Airlines called Dave Carroll to apologize and to offer the same \$1,200 in flight vouchers he had asked for back in November, plus an extra \$1,200 in cash for his trouble. 40 United Airlines also announced that: "His video is excellent, and we plan to use it internally as a unique learning and training opportunity."
5	Domino's Pizza	Censorship	Domino's tried to take down the videos and the original videos are now taken down by YouTube but still available on other websites. 42
	77224	Apology	- Domino's opened a Twitter account to answer questions and also posted a YouTube apology from the company's USA President, Patrick Doyle, which said in part: "It sickens me to think that two individuals can impact our great system, where 125,000 men and women work for local business owners." 43
		Compensation	- Domino's closed the store to sanitize it and the two employees were fired. ⁴⁴ The store also discarded all open containers of food, which cost hundreds of dollars. Domino's created a Twitter account, @dpzinfo, to address the comments. ⁴⁵
6	Motrin	Apology	- This apology was on Motrin's website: "With regard to the recent Motrin advertisement, we have heard you. On behalf of McNeil Consumer Healthcare and all of us who work on the Motrin Brand, please accept our sincere apology. We have heard your complaints about the ad that was featured on our website. We are parents ourselves and take feedback from moms very seriously. We are in the process of removing this ad from all media. It will, unfortunately, take a bit of time to remove it from our magazine advertising, as it is on newsstands and in distribution. Thank you for your feedback. It's very important to us. Sincerely, Kathy Widmer Vice President of Marketing, McNeil Consumer Healthcare"
		Compensation	- Motrin removed the online advertisement. ⁴⁶
7	JetBlue Airways	Apology	- JetBlue posted a three-minute apology YouTube video clip from CEO, David Neeleman. JetBlue apologized for the service failure and explained how it planned to improve. ⁴⁷
		Compensation	- JetBlue offered immediate refunds and travel vouchers to customers stuck on Valentine's Day planes for more than three hours. The company also created a "service guarantee" and, on February 20, announced a new "Customer Bill of Rights", 48 which requires the airline to refund in certain situations. 49
8	Taco Bell/KFC	Apology	- KFC/Taco Bell's press release mentioned that: "Nothing is more important to us than the health and safety of our customers [] that this was an isolated incident at a single restaurant at 331 – 6th Avenue in Greenwich Village, New York, and it is totally unacceptable." 50

³⁹http://www.cnet.com/news/nestle-mess-shows-sticky-side-of-facebook-pages/

⁴⁰ http://www.thestar.com/business/2012/05/18/dave_carroll_is_still_having_problems_with_airlines_roseman.html

⁴¹http://news.bbc.co.uk/2/hi/americas/8145230.stm

⁴² http://www.sfgate.com/business/article/How-Domino-s-responded-to-prank-video-3163363.php

⁴³ http://www.forbes.com/2009/04/24/dominos-youtube-twitter-leadership-cmo-network-marketing.html

⁴⁴ http://www.sfgate.com/business/article/How-Domino-s-responded-to-prank-video-3163363.php

⁴⁵ http://www.nytimes.com/2009/04/16/business/media/16dominos.html

⁴⁶ http://crunchydomesticgoddess.com/2008/11/16/weve-blogged-and-tweeted-the-motrin-ad-what-can-moms-do-next/

⁴⁷http://www.adweek.com/news/advertising-branding/jetblue-knows-how-communicate-customers-social-and-when-shut-152246

⁴⁸http://www.jet<u>blue.com/flying-on-jetblue/customer-protection/</u>

⁴⁹http://www.businessweek.com/stories/2007-03-04/an-extraordinary-stumble-at-jetblue

⁵⁰http://socialmediaunleashed.wordpress.com/2012/06/21/yum-brands-inc-case-rats-in-kfc-taco-bell/

	Compensation	- Yum! Brands' President, Emil Brolick, made the following statement on the company's website in response to the New York City Taco Bell/KFC rats' incident: "We want to reassure our customers that we take this isolated incident in Greenwich Village, N.Y. very seriously and apologize for any inconvenience this may have caused. We believe each of our brands has the highest restaurant quality standards and they are being followed. We want to reassure customers that our restaurants are clean and safe. We will continue to work closely with the New York City Health Department and if there's ever an issue, we will immediately resolve it." 51
--	--------------	--

Appendix II- Social media crisis outcomes with examples

	Company	Social media crisis	Examples
1	Mattel	Impact on reputation	- Greenpeace accused Mattel of destroying the Indonesian rainforest and targeted the company's reputation. 52
2	GAP	Impact on brand value	- As a result of the Gap failure in new logo, the company experienced a slight drop in brand value. 53
3	Nestlé	Impact on reputation Financial impact	- The effect of Greenpeace and public attacks was a damaged reputation and loss of business, reflected by a dip in its share price, due to its supplier, Sinar Mas. ⁵⁴
4	United Airlines	Impact on reputation Financial impact	- United Airlines lost 10 per cent of its share value – a massive \$180 million – after damaging Dave Carroll's guitar. 55
5	Domino's Pizza	Impact on reputation Impact on brand value Financial impact	 Domino's waited about 48 hours to respond and the video received nearly 1 million views before it was taken down, which already represented "significant damage to the brand".⁵⁶ YouGov Research confirmed that the perception of Domino's brand quality went from positive to negative in 48 hours.⁵⁷
6	Motrin	Call for boycott	- Bloggers began calling for boycott and asked their readers to alert the mainstream press. ⁵⁸
7	JetBlue Airways	Impact on reputation Financial impact	- The incident hurt JetBlue's image. ⁵⁹
8	Taco Bell/KFC	Impact on reputation Financial impact Call for boycott	 Some of the onlookers vowed to never eat at the restaurant again, yet others were only mildly repulsed.⁶⁰ Stocks of Yum! Brands Inc. that owns the chains of KFC, Taco Bell, and Pizza Hut took a drop of at least 2% in one day.⁶¹ The day of the incident, Yum! Brands' stocks closed at \$60.51, down 55 cents.⁶²

⁵¹http://www.qsrmagazine.com/news/kfc-taco-bell-responds-rat-footage

⁵² http://socialmediacauses.over-blog.com/2014/02/when-greenpeace-ruins-mattel-e-reputation.html

⁵³https://www.baekdal.com/insights/gaps-failure-wasnt-the-logo

⁵⁴http://www.theguardian.com/sustainable-business/palm-oil-greenpeace-social-media

⁵⁵http://www.dailymail.co.uk/news/article-1201671/Singer-Dave-Carroll-pens-YouTube-hit-United-Airlines-breaks-guitar-shares-plunge-10.html

⁵⁶http://adage.com/article/news/crisis-pr-assessing-domino-s-reaction-youtube-hubub/136086/

⁵⁷http://www.forbes.com/2009/04/24/dominos-youtube-twitter-leadership-cmo-network-marketing.html

⁵⁸http://parenting.blogs.nytimes.com/2008/11/17/moms-and-motrin/

⁵⁹ http://www.nytimes.com/2007/02/17/business/17air.html

⁶⁰ http://www.nytimes.com/2007/02/25/nyregion/25rats.html

⁶¹ http://socialmediaunleashed.wordpress.com/2012/06/21/yum-brands-inc-case-rats-in-kfc-taco-bell/

⁶² http://www.huffingtonpost.com/huff-wires/20070223/restaurant-rats/