# Corporate Crisis Management Through Twitter

A Case Study Analysis of Qantas Airways

by

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# **Abstract**

I study the airline industry, specifically Qantas Airways' decision to ground its entire fleet in response to labor disputes on October 29, 2011 and the subsequent social media crisis that followed with the company's #QantasLuxury contest. I apply metrics based on "retweets" and "favorites" to a dataset of all Qantas crisis-related and contest-related tweets to measure the effect of Qantas' social media strategies. I draw comparisons between Qantas' Twitter strategy during the company's crisis of choice, to the airline industry's #ashcloud Twitter strategy in response to the Eyjafjallajökull (April 2010), the Grimsvötn (May 2011), and Puyehue (June 2011) volcanic eruptions. In doing so, I attempt to identify effective social media practices for corporations in crisis.

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# I. Issues and Relevance / Background

Many recognize the ubiquitous reach and growing dominance of web-based social media as official information sources. Multilateral transfer of information, real-time information dissemination, near-instant diffusion of information across large audiences, in addition to other attractive traits contribute to the growing clout of social media as interactive information platforms. As communication mediums change and stakeholders demand engagement through social media, corporations must cater to this demand, particularly in crisis situations when corporations are most vulnerable.

Twitter, in particular, is a social media platform embraced by MNC's and NGOs for corporate communication with multiple stakeholders. While incorporating social media into corporate strategy to address key stakeholders may seem an obvious investment, this requires substantial up-front and maintenance costs. As well, firms must also anticipate lead-time to build the internal infrastructure for regular social media activity, establish a readership and/or following, and effectively manage social media accounts. This lead-time to set up social media infrastructure is not available during corporate crises that require immediate action.

### 1.1 Corporate Crises

Clark defines a corporate crisis as an event or issue that threatens corporate goals and reduces the corporation's ability to control or direct the environment, with short decision or response time.

Oftentimes, corporate crises are induced by corporate actions or inadequacies, but can also result from unforecasted events and issues such as natural disasters or unexpected public reactions to

<sup>1</sup> S. Inauen, D. Schoeneborn & A.G. Scherer, 2011

corporate action. Corporate crises require that corporations react promptly and respond strategically to manage public reaction and effectively recover to normal operations. While corporate crises can potentially threaten company performance, these situations also present the opportunity for corporations to boost company reputation and increase public favor. On the other hand, an ineffective response strategy to a crisis can spur a crisis of its own resulting in what I call *the boomerang effect*. This was the case for Qantas Airways, when Qantas Airways' Twitter campaign to deflect attention from their employee lockout and failed union negotiations generated a public relations crisis. This reiterates the idea that after-effects and/or responses to a crisis can exaggerate the crises or in some cases, cause a secondary crisis.

# II. Literature Review

I build upon a small but growing inventory of works on the topic of social media and crisis management. Prior literature has dissected the components of a successful crisis management strategy. In 1998, Pearson found that the key variables to successfully managing a crisis are: team vs. individual responses, alliance and coordination of stakeholders, information dissemination, and organization or industry visibility. Social media has a disruptive effect on three of the four variables, making social media a powerful crisis management tool, particularly with regards to information dissemination. Furthermore, Pearson concluded that corporations could also contribute to their crises (Pearson, 93) via social media. As such social media is both an explosive opportunity and a disruptive change to the fundamental crisis management dimensions.

<sup>&</sup>lt;sup>2</sup> Pearson, C. M. & Clair J.A., 1998

Literature also points to the impact of social media on other functions within a corporation besides crisis management. For example, from the perspective of reputation management, social media has amplified the impact of consumer-to-consumer communication, as it not only simultaneously allows corporations to interact with customers, but also allows customers to discuss with one another more easily. This dual communication makes reputation management more difficult, as corporate managers cannot control conversations between customers. At the same time, Madden and Smith suggest that corporations can take advantage of social media for reputation management by increasing promotion through blogs and social media platforms.

Twitter provides corporations with a creative arena to employ a variety of tactics in reaching out to stakeholders. Honey and Herring found that corporations use Twitter for *informal collaborative purposes* and conversation. Moreover, Honey and Herring present that there is a subtlety in the type of information presentation on Twitter based on the usage of Twitter specific notations, namely the @ symbol. They found that most tweets on Twitter are used to report personal experiences, in particular, tweets with the @ symbol were focused on providing specific information to an addressee and provoking conversation. On the other hand, the majority of tweets without the @ symbol were general announcements. I use this distinction as the basis for my *engagement* metric.

Marrying crisis management and social media use, Palen found social media to be a platform for *social convergence* and an ideal forum for online participation by individuals about a crisis

<sup>&</sup>lt;sup>3</sup> Madden, M & Smith A, 2010

<sup>&</sup>lt;sup>4</sup> Honey, C. & Herring, S.C., 2009

<sup>&</sup>lt;sup>5</sup> Honey, C. & Herring, S.C., 2009

event. Vieweg found that during two natural hazards events in 2009, social media could also be an ideal outlet to provide timely situational updates. However, literature has not yet addressed how corporations can harness social media effectively to adapt to the changing crisis management function.

# III. Issues Addressed

Recognizing the disruptive capacity of social media to the corporate crisis management function of firms, how can corporations harness social media to manage corporate crises? More specifically, what are social media practices that effectively address the following dimensions for crisis management?

- a. Customer engagement- to provide an outlet for public to voice concerns and opinions
- b. *Timely information updates* to provide one directional real-time updates
- c. Attention deflection- to provide a screen to direct public attention away from the crisis

Through evaluation of various Twitter episodes in the airline industry, I attempt to draw lessons for corporations in crisis.

# IV. Data

#### 4.1 Twitter

Twitter launched on July 15<sup>th</sup>, 2006 as a real-time information network.<sup>6</sup> As a social networking microblog, Twitter has since become a prominent player in the social media arena. One in four

<sup>&</sup>lt;sup>6</sup> http://twitter.com/about

<sup>&</sup>lt;sup>7</sup> http://techcrunch.com/2006/07/15/is-twttr-interesting/

people check their Twitter accounts daily, 50 million tweets are sent per day, and approximately 460,000 new users register each day. <sup>8 9</sup> On Twitter, users create accounts that act as personal microblogs through which they post information via text-based "tweets" limited to 140 characters. Tweets are posted through various means i.e. web, SMS, smart phone applications, synchronization to other blogs, and Facebook. Through tweets, shared posts, and replies, users accumulate *followers* or a reader base for their accounts. In addition, Twitter users build networks by subscribing to other microblogs as *followers*, "following" the accounts' Twitter updates and activities. Users indicate interesting and/or useful tweets by "retweeting" them to personal feeds, essentially sharing a post initially posted by another user. Users also "save tweets for later", or indicate usefulness by making a tweet a "favorite". Key symbols used in the Twitter language are the "@" symbol, used to reply to specific user accounts, and the "#" symbol which indicates a common reference and/or grouping of information.

I collect Twitter data via the Topsy database (www.topsy.com), an online search engine managed by Topsy Labs that mines social media portals. Topsy Labs also publish white papers on social media related topics, as well as experiments with social media indexes by creating statistics that help consumers interpret and manage social media use.

#### 4.2 Datasets

I conduct Topsy searches filtering for *tweets*, in *English*, over a time period designation of *all-time*. I generate four separate datasets: tweets by Qantas Airways' official Twitter channel,

<sup>&</sup>lt;sup>8</sup> Media Report, S. Galloway

<sup>&</sup>lt;sup>9</sup> Numbers based on the latest numbers released by Twitter via the twitterblog. http://blog.twitter.com/2011/03/numbers.html

tweets by the public about Qantas Airways' grounded fleet, tweets by the public about the #QantasLuxury contest, and tweets that contain the #ashcloud hashtag. I also log the number of retweets and tweets by influential people, based on the Topsy's search results for Qantas Airways mentions. By following the tweet to Twitter, I source the exact posting date and time, along with the number of times the tweet was *favorited*.

### 4.3 Topsy Database vs. Twitter Database

I collect tweets from Topsy rather than from the Twitter Timeline, as Twitter only displays the most recent 3200 tweets for each user account. I recognize that by using Topsy I introduce the risk of potential error due to missing information, i.e. tweets missed by Topsy coding. Moreover, my choice to use Topsy comes with the limit that I cannot view the content of the retweets of the tweets I catalogue. Despite these limits, as of current, the Topsy Database is the only accessible past tweet aggregator that has operated since the Eyjafjallajökull volcano eruption in April 2010.

# V. Crises Analysis

I analyze the use of Twitter during the following corporate crisis cases:

- 1. Crisis of Choice: Qantas Airways Labor Lockout
- 2. Boomerang Crisis: #QantasLuxury Contest
- 3. Unforecasted Crisis: April 2010 Eyjafjallajökull Eruption in Iceland
- 4. Unforecasted Crisis: May 2011 Grimsvötn Eruption in Iceland
- 5. Unforecasted Crisis: June 2011 Puyehue Eruption in Chile

To conduct a comparative analysis of the crises, I apply tweet metrics to collected tweets from the above crises. The metrics I apply are: reach, usefulness, impression, informativeness, engagement, and tweet diversity. The definitions of these metrics are detailed in Figure 1 in the

Appendix. Based on the limits associated with data from Topsy, I cannot make concrete assertions that the metrics precisely gauge social media strategy effectiveness. Nonetheless, these metrics showcase the different social media approaches used in each crisis, and the diverse public reactions that they produced. The results of applying these metrics are summarized in Figures 2 and 3 in the Appendix.

In addition, I conduct a basic sentiment analysis using indicator variables to compare the difference in public sentiment between the crises, as well as to measure overall sentiment for each dataset. I code positive tweets with +1, negative tweets with -1, and neutral tweets with 0. I compare the percentage of positive tweets to percentage of negative tweets in each dataset.

Results were in line with findings from the key metrics and the types of crisis each situation represents. <sup>10</sup>

To ensure that I did not inject bias into my classifications, I ran the tweets through uclassify.com's sentiment classifier. Uclassify.com is an online public text and API classifier that is managed from Stockholm, Sweden. Based on the text submitted to the classifier, Uclassify.com presents a percentage output of how positive and negative the text is.

Uclassify.com's classifications were generally consistent with my classifications.<sup>11</sup>

VI. Crisis of Choice: Qantas Airways Labor Lockout

#### 6.1 Qantas Airways

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<sup>&</sup>lt;sup>10</sup> Refer to Figure 4 in the Appendix.

<sup>11</sup> Refer to Figure 5 in the Appendix.

Based in Sydney, Australia, Oantas Airways is the largest full service Australian airline. Oantas employs 35,700 people with 93% based in Australia. <sup>12</sup> In 2011, Qantas carried 28 million passengers with an average of 4,900 flights per week, servicing the airline's main markets of domestic and international transportation to and from Australia from 55 international destinations. 13 Oantas Airways has industry-recognized customer service, and holds majority market share in Australia, their main competitor being Virgin Australia. However, the airline's world airline rankings have been declining in recent years, from second place in 2007 to its current position of eighth place in 2011. 14 Much of this decline in rankings is attributed to the subpar standard of Qantas Airways' online platform, a component of which is social media integration and activity. The decline in public favor pressures Qantas Airways to allocate additional resources to develop their online platform and presents a compelling explanation as to why Qantas Airways made bold social media choices in 2011 during both their crisis of choice and boomerang crisis.

### 6.2 Labor Union Disputes and Industrial Action

Over the course of 2011, Qantas Airways faced severe labor disputes with three major Australian labor unions: the Transport Workers Union (TWU), Australian Licensed Engineers Union (ALAEA), and the Australian and International Pilots Union (AIPA). The labor unions demanded better working conditions, job security clauses, and higher wages for pilots, licensed engineers, ground staff, and aircraft mechanics. Employee discontent peaked in August when the airline announced plans to develop an Asia-based premium carrier, as well as 1000 job cuts.

Employees' primary concern was that through this venture, Qantas Airways would offshore jobs

 <sup>&</sup>lt;sup>12</sup> Investor Relations, Qantas
 <sup>13</sup> Qantas 2011 Databook
 <sup>14</sup> Skytrax World Airline Awards

to Asia. These concerns enacted strikes and refusals to work overtime, resulting in reduced and altered flight schedules affecting Qantas Airways' performance. However, labor issues are common in the airline industry with flight carriers' consistent efforts to cut labor costs. For example, American Airlines filed for bankruptcy in April 2012 to cut labor costs.

From August until the labor lock-out in October, continued disruptions and over 600 cancelled flights affected approximately 70,000 passengers, costing Qantas Airways \$68 million in net losses and approximately \$15 million in lost revenue per week. <sup>15</sup> The labor unions' discontent heightened when Qantas continued to take cost cutting and efficiency measures. Series of strikes and service disruptions culminated in industrial action from the unions, and Qantas Airways' decision to lock out all employees and ground its entire fleet on October 29, 2011. CEO Alan Joyce announced at 5:27PM AEDT that the lockout would officially begin at 8PM AEDT on Monday, October 31, but would commence immediately as of 5PM AEDT on October 29, 2012. <sup>16</sup>

The Government of Australia intervened shortly after, requesting an urgent hearing by Fair Work Australia, a national workplace relations tribunal. Federal Transport Minister Anthony Albanese released the following official statement at 6:56PM AEDT on October 29:

"We are very concerned about Qantas' actions of which we were notified only mid afternoon. In light of Qantas' announcement today regarding the grounding of its fleet, the Government is making an urgent application to Fair Work Australia under Section 424 of the Fair Work Act to terminate all industrial action at Qantas. We will be seeking an urgent hearing of that application by Fair Work Australia."<sup>17</sup>

16 http://www.qantas.com.au/travel/airlines/media-releases/oct-2011/5218/global/en

 $<sup>^{15}\</sup> http://www.qantas.com.au/travel/airlines/media-releases/oct-2011/5218/global/en$ 

<sup>17</sup> http://www.news.com.au/travel/news/qantas-grounds-entire-fleet/story-e6frfq80-1226180315331

Fair Work Australia held a hearing at 10PM AEDT on October 29, 2011 in Melbourne, and officially halted the lockout as of 2am AEDT on October 31, 2011. Fair Work Australia mandated unions to halt any further strike activity and required both Qantas Airways and the labor unions to begin 21 days of negotiations. The first Qantas Airways flight resumed at 2PM AEDT on October 31, 2011 and the flight schedule was returned to normal on November 1, 2011.

Over the weekend of October 28 to October 31, Qantas reported that over 68, 000 passengers were impacted by 447 cancelled flights, resulting in costs upwards of \$80 million. While profit losses associated with the labor disputes can be considered a corporate crisis of its own for Qantas Airways, the broader nature of this crisis was self-inflicted. Qantas Airways' decision to ground its entire fleet to communicate a strong message to labor unions was a shrewd strategic action taken by Qantas Airways. Moreover, this suggests that this corporate crisis was planned, and lends itself to the potential that Qantas Airways likely anticipated some of the outcomes and public response to this action.

## 6.3 Qantas Airways' Social Media Strategy

To notify the public about the lockout, Qantas Airways called a general press conference for 5:00PM AEDT on October 29, as well as issued a media release on October 29 titled "Qantas responds to industrial action". A rolling coverage report by NewsMedia recorded that the precise time CEO Alan Joyce delivered news of the fleet grounding was at 5:27PM AEDT. <sup>19</sup>

<sup>&</sup>lt;sup>18</sup> http://www.qantas.com.au/travel/airlines/media-releases/oct-2011/5219a/global/en

<sup>19</sup> http://www.news.com.au/travel/news/qantas-grounds-entire-fleet/story-e6frfq80-1226180315331

However, Qantas Airways' first communication to the public about the fleet was actually through a tweet on Twitter posted at 5:18PM AEDT.<sup>20</sup> This 11 minute slight precedence of the tweet over Alan Joyce's statement to the press has a few implications. Firstly, it suggests that Qantas Airways wanted to incorporate social media as an important communication component in relaying information about the lockout to the public. Secondly, based on the fact-oriented content and reporting tone of the tweet, Qantas seems to have wanted to use Twitter to provide quick and timely updates. The initial tweet about the lockout was retweeted 143 times, 9 times by influential users.<sup>21</sup> The tweet achieved roughly average traction as measured by its *reach* of 143 retweets, which is just below the average of 172 retweets for tweets by Qantas Airways official Twitter account.

Following the initial tweet about the employee lockout, Qantas Airways continued to provide updates through Twitter with a formal, direct, and to-the-point tone. Mapping Qantas Airways' tweet activity against the events surrounding the labor lockout reveals that there is an obvious pattern of deliberate tweeting by Qantas Airways just prior to each major development in the crisis. However, Qantas Airways tweeted only nine times over the course of two days, a relatively low frequency given the urgency of the situation. Comparing tweets by Qantas Airways' official channel with the other tweet datasets, Qantas Airways' official tweets had a comparatively strong *informativeness score* of 18.06, representing that for each time an account "favorited" the tweet for personal reference, the tweet was shared roughly 18 times.

Furthermore, Qantas Airways' strategy scored 0% in *engagement*. This score further evidences

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<sup>&</sup>lt;sup>20</sup> The tweet posted by Qantas Airways via @Qantas Airways was, "From 8pm AEDT on 31/10 Qantas will lock out all employees who will be covered by the new ALAEA, TWU and AIPA agreement."

<sup>&</sup>lt;sup>21</sup> An "influential user" is an output from a Topsy algorithm that indicates influential accounts.

Qantas Airways' strategy to provide one-directional news updates as opposed to engage and interact with customers.

Also in line with the objective to provide timely information updates, Qantas Airways directed their online audience in one direction. Qantas Airways did not mention any of the corporation's social media efforts and tactics in their official media releases. They did not try to direct traffic towards the social media outlets, and maintained the one directional communication. Moreover, through official statements on Qantas Airways' corporate website, Qantas Corporate Communications directed passengers to updates posted on the corporate Travel Alerts page rather than Twitter. At the same time, 30% of Qantas Airways' tweets simply provided links directing the audience to press releases. In addition, it seems that Qantas Airways transferred the same tone they use for press releases to their tweets. No traffic directed from the corporate website to Qantas Airways' Twitter account, suggests that Qantas Airways' social media strategy was not to use Twitter as the main portal for official information updates, but rather to use Twitter to drive the online audience towards more classic crisis management portals. Social media in this case was not meant to be the official word of the company but rather a marketing and support tool for Qantas Airways. Qantas Airways and other companies should direct traffic in both directions between social media platforms and corporate websites to more effectively communicate that social media activity is an official corporate information channel.

6.4 Public Response to Qantas Airways' Grounded Fleet and Social Media Strategy

The public had a variety of responses to Qantas Airways' grounded fleet and one-directional social media strategy. The majority (69%) of the tweets about Qantas' grounded fleet were by

individuals. However, a significant portion (25%) were tweets by the Twitter handles of official news reporting agencies such as @abcnews, @nytimes, and @bbcbreaking. This is also reflected in the high *informativeness* score of 21.93 for this dataset. Such a high score suggests that tweets by these reporting agencies and about the grounded fleet were recognized by the public as being worth sharing and useful. This score is the highest amongst all the gathered tweet datasets. The top three tweeters that tweeted the most frequently in this dataset were @bbcbreaking, @stephenfry, and @abcnews, respectively.

Results from the sentiment analysis show that the dataset of public tweets about Qantas grounded fleet is 42.3% negative, 42.3% neutral, and 15.4% positive. Interestingly this was also the dataset with the highest informativeness score, and highest reach score. Therefore, this suggests that the audience and those tweeting about this issue were being informed, but informed by tweets with a negative bias. Also, perhaps the equal percentage of neutral tweets can be explained by the 25% of tweeters that were reporting agencies that on the whole, deliver objective unbiased tweets.

### *6.5 Noteworthy Tweeters*

Several noteworthy tweeters were found in the dataset of public responses to Qantas Airway's grounded fleet. In wake of Qantas Airways' crisis situation, important tweeters took advantage of the crisis as an opportunity to develop their own following and manage their own brands and reputations.

<sup>&</sup>lt;sup>22</sup> The public responses to Qantas Airways grounded fleet scored an average of 21.9 on informativeness and 222.3 in reach. These were the highest scores amongst all datasets.

#### 6.5.1 @Terencecarter

@Terencecarter's tweet, "The #Qantas pilots wanted 2.5% pay rise to keep up with inflation. Alan Joyce gave himself a 66% pay increase to keep up with Branson." was retweeted 1742 times, more than 5 standard deviations above the average number of retweets for the dataset of public tweets about the Qantas Airways' grounded fleet.

Terence Carter is an editorial photographer, currently based in Dubai, who has contributed works to *The Lonely Planet, Dorling Kindersley, Lifestyle+Travel, Paperplane, and Get Lost* publications. Terence Carter has a following of 978 on Twitter and has tweeted 3,953 on Twitter. These Twitter stats make it unlikely that he should be able to gain traction of 1742 retweets for his tweet, as this number of retweets is uncharacteristic of an account with only mid-popularity on Twitter. It seems that his attack at Alan Joyce went viral as it amplified the existing negative sentiment about Qantas Airways from the grounded fleet.

#### 6.5.2 @Stephenfry

Unfortunately for Qantas Airways', one of the stranded passengers was Stephen Fry, an English actor, screenwriter, and entertainment personality. Stephen Fry is considered a Twitter celebrity and a highly influential user with 4,201,584 followers on Twitter. Over the course of the time Qantas Airways' fleet was grounded, @Stephenfry tweeted a total of four times. Each of his tweets was favorited upwards of 20 times, indicating usefulness greater than the average usefulness of 12.24 for the dataset. Sentiment analysis shows that all his tweets were negative in content. This is expected as all his tweets relayed his frustration as a stranded passenger, and

were sarcastic in tone. His large following and noticeable irritation likely had a significant impact on Qantas Airways brand value erosion and negative portrayal during this crisis situation.

## 6.5.3 Virgin Australia

Virgin Australia also embraced this opportunity to take advantage of Qantas Airways' vulnerable position. Of the 6% of tweets that were by airlines in the dataset of public responses about Qantas Airways' grounded fleet, Virgin Australia's tweets accounted for 67%. The company tweeted at regular intervals during the time Qantas Airways' fleet was grounded. Virgin Australia was not shy about tweeting direct promotions to disgruntled Qantas Airways passengers, and publicizing their success making targeted attacks at Qantas Airways. At 7:45PM AEDT on October 29 @VirginAustralia tweeted, "For Qantas passengers that are affected, this is the page to keep an eye on - http://t.co/l6lyT6p7 - its busy times, so pass it on twitter!" This tweet received 341 retweets, 10 retweets by influential people and, was favorited 10 times. The next day, at 9:03AM on October 30, @VirginAustralia announced the special "Stranded Qantas Passenger recovery fares" tweeting, "There are 140,000 seats still avail for sale thru until Nov 6th. Stranded Qantas Passenger recovery fares -> http://t.co/l6lyT6p7" This too gained significant traffic, with 113 retweets, 5 by influential tweeters, and over 50 favorites. Using colloquial language and a warm tone, Virgin Australia's tweets was retweeted more than the average retweets of the public's response to Qantas Airways dataset.

In addition, Richard Branson, Chairman of the Virgin Group, tweeted from his personal account, acknowledging the efforts of Virgin Australia while also taking a clever attack at Qantas Airways. On October 31 at 1:20AM, @richardbranson tweeted, "Congrats everybody at

@VirginAustralia & @VirginAtlantic for doing a great job in getting as many Qantas

passengers on their way as possible." Richard Branson's approach was markedly different from

Alan Joyce's removed stance. Richard Branson seems to have understood that tone was crucial

and tried to appeal to customers desire for sympathy as opposed to as more information with

marginal value.

Seeing the clout and power that social media has on shaping corporate image, Qantas Airways hired four new managers to compose a social media division on November 16, 2011. This team developed the #QantasLuxury Contest, a social media campaign to enhance brand image and

restore Qantas Airways' favor in the public eye.

VII. Boomerang Crisis: #QantaLuxury Contest

7.1 #QantasLuxury Contest

To temper negative perceptions of the firm after the grounded fleet and to deflect attention from failed contract negotiations with TWU, ALAEA, and AIPA, the new social media team devised the #QantasLuxury Contest for its customers. The contest was launched on November 22, 2011, on Twitter and was set to run until November 23, 2011. The contest was launched via following

tweet through the @QantasAirways account:

To enter tell us 'What is your dream luxury inflight experience? (Be creative!) Answer must include #QantasLuxury.TCs http://t.co/WDTO0FKG

The prize for the contest winner was a first class amenity kit and Qantas Airways printed

pajamas. A spokeswoman from the firm justified the prize choice stating:

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"We receive positive feedback from customers via social media about the Qantas premium inflight products. Over the past 12 months we have conducted a number of competitions for customers, fans and followers on our Twitter feed (@qantasairways), giving away these products." <sup>23</sup>

Against the intent for the contest, the #QantasLuxury Contest became an outlet for customers to voice their gripes about negative in-flight experiences, and to make sarcastic suggestions about Qantas Airways' existing service. For example, the very first tweet response to the contest was by @snurb\_dot\_info, "Planes that arrive intact and on time because they're staffed and maintained by properly paid, Australia-based personnel. #QantasLuxury." A flood of posts followed this initial response with the same spirit. The tweet with the greatest reach in this dataset, with 317 retweets was lehmo23's tweet, "#virginluxury getting an exit row #tigerluxury getting a biscuit #qantasluxury getting a pilot, a plane, engineers and baggage handlers." This is an example of the currently trending social media term bashtagging. <sup>24</sup> Bashtagging is when a company's promotional hashtag is used to bash the company.

While the dataset of responses to the #QantasLuxury contest had the greatest *tweet diversity* with 71 distinct tweeters, it also had low *reach* comparative to the other datasets, with an average of 33.46 retweets per tweet. In addition, this dataset also had the lowest *impression* rating amongst the datasets of 3.58 retweets by influential people. This suggests that the accounts that retweeted and/or responded to the #QantasLuxury contest do not have large readerships and followings on Twitter. This is further evidenced by the fact that 94% of the tweets contained in this dataset were tweets by individuals.

 $<sup>^{23}\</sup> http://www.smh.com.au/travel/travel-news/qantas-makes-hash-of-tweet-campaign-20111122-1nsa4.html#ixzz1spo2dK18$ 

<sup>&</sup>lt;sup>24</sup> Wired Magazine, May 2012

Based on sentiment analysis, the tweets in response to #QantasLuxury were 63.3% negative, 20% neutral, and 16.7% positive. Had the #QantasLuxury contest unfolded as planned, there should not have been such a skew towards negative sentiments. However, as expected of the *boomerang effect*, the majority of tweets are negative. Furthermore, as this dataset's primary tweet group was individuals, with 94.4% of tweets by individuals, I infer that those tweeting about the #QantasLuxury contest were travelers and customers of Qantas Airways that had complaints about Qantas Airways. This dataset also had comparatively low informativeness and usefulness scores indicating that the content of these tweets was not substantial, which further validates that the tweeters were those unsatisfied with Qantas Airways. However, uclassify.com found that the tweets in response to the #QantasLuxury contest were more positive (54.8%) than negative (45.2%). I think that Uclassify.com was not able to classify the words based on context, and did not pick up the sarcasm behind many of the tweets in this dataset.

### 7.2 Spoof Accounts

Furthermore, 8.9% of the tweets in the #QantasLuxury dataset were tweets by spoof accounts: @QantasPR and @alanjoyceCEO, unauthorized by Qantas Airways. @QantasPR accumulated thousands of followers, and was later reported by Qantas Airways for breaching Twitter terms and confusing Qantas Airways customers. <sup>25</sup> @QantasPR posted both blatantly insulting posts, as well as ambiguous posts that were misleading for customers. For example, posts by @QantasPR include, "Firing the #qantas Marketing department before the Signage department, now. Not even our intern thought #qantasluxury was a good idea.", and "Simply tweet: # of luggage,"

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 $<sup>^{25}</sup>$  http://www.smh.com.au/travel/travel-news/spoof-qantas-twitter-account-shut-down-20120214-1t3h5.html#ixzz1t5H5gJc8

colour, your flight & #QantasLuxury (Make sure geotagging is switched on and you're done).

Spread the word!"

@QantasPR continued to post about #QantasLuxury until January 2012. Qantas petitioned to suspend the account for taking on a false identity, and the account was eventually suspended in February 2012. However, the public negatively perceived Qantas Airways' method of handling this spoof account. For example, digital consultant Leslie Nassar argues, "Basically what [Qantas Airways is] saying is that their customers are not really that bright and able to read stuff from 'Qantas PR' and know that it was fake," said Mr Nassar. 26

#### 7.2.1 #AlanJoyceCEO and @alanjoyce

@AlanJoyceCEO was another spoof account that tweeted about the #QantasLuxury contest. The @AlanJoyceCEO handle tweeted, "#QantasLuxury is what I fucking tell you it is." The obviously false tone of this tweet prevented this tweet from going viral on Twitter, and the account was quickly suspended.

On the other hand, an American student Alan Joyce's Twitter account @alanjoyce was victim to misguided abuse on Twitter by customers who thought his account handle was the account for CEO Alan Joyce. <sup>27</sup> This points to the additional possibility that social media crises are not isolated to the primary organization in crisis, but could also have reputation damaging effects on other third parties. Perhaps this also proves the importance of officiating corporate accounts on Twitter and making known to public which accounts are official channels. Furthermore,

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<sup>&</sup>lt;sup>26</sup> http://www.theaustralian.com.au/media/spoof-qantas-twitter-account-suspended/story-e6frg996-1226270368792

<sup>&</sup>lt;sup>27</sup> http://www.news.com.au/technology/alanjoyce-abused-on-twitter-but-hes-not-the-qantas-boss/story-e6frfro0-1226180474705

corporations should be astute about responding to misleading accounts and obtaining copyright and/or exclusive rights to certain account names.

## 7.3 The Boomerang Effect

Interestingly, while there is no longer significant reference or tweet activity about Qantas Airways' grounded fleet incident, there continues to be mention of the #QantasLuxury contest and hashtag. This fact demonstrates what I coin the *boomerang effect*. The boomerang effect is when a corporation in effort to deflect attention away from a major crisis, inadvertently brings additional negative attention back to itself.

#### 7.4 Social Media Lessons

Qantas Airways' new social media team committed critical errors with this social media campaign. To begin, Qantas Airways chose the wrong timing for the #QantasLuxury contest. The campaign was launched a day after failed negotiations with labor unions and only a month after the employee lockout. At a time when customers sought sympathy and expedient solutions to their recent travel problems caused by the airline, Qantas Airways chose to put out a contest that was light-hearted in tone, and an obvious effort to deflect attention from the labor dispute crisis. Moreover, Qantas Airways was insensitive to its audience. Based on the offered prize, and "luxury" connotation of the contest, it seems that the contest was targeted to engage customers from the economy cabin. However, again these were the customers who underwent the most severe service interruptions and unpleasant experiences with rebooking and travel adjustments. Furthermore, throughout the fleet grounding in the month before, Qantas Airways made few customer engagement efforts through Twitter, and rather provided one-directional

updates. This sudden change in tone towards an engagement-focused tweet is not within the character of Qantas Airways' Twitter account. Though Qantas Airways received negative responses, the Twitter campaign went viral and received an unprecedented amount of attention for Qantas Airways. This enhances the importance of the need for Qantas Airways to control this new traffic to their Twitter account, which it was unable to do.

#### 7.5 Social Media and Corporate Value

Interestingly, Qantas Airways stock (ASX:QAN) did not respond negatively to the labor lockout over the weekend of October 28 to October 31. This is depicted in Figure 6 in the Appendix.

Despite costs to the company from a marketing perspective and additional costs for the lockout and inconveniences to passengers, the lockout might have increased the value of the company if its main goal of reducing labor costs had become more achievable. This may have also benefitted other firms in the industry such as Virgin Australia, though it does not seem to be shown in changes in the stock price. While the crisis is not reflected in the stock price changes, it is captured in changes to brand value and reputation.

Furthermore, from November 22, 2011 to November 23, 2011, during Qantas Airways' #QantasLuxury contest, Qantas Airways' value also does not seem to be greatly affected. Most of the value erosion over the period of the contest can be attributed to the market movements, as can be seen in Figure 7 in the Appendix. An important qualifying point is that changes to the stock price do not isolate the value lost due solely to the social media contest, as it includes the effect of market movements and other corporate actions.

# VIII. Unforecasted Crisis: #Ashcloud

#### 8.1 2010 Eyjafjallajökull Eruption

Social media was also an important communication tool during the eruption of Icelandic volcano Eyjafjallajökull in April 2010. I look at this crisis to see the origins and background of the #ashcloud hashtag. However I concentrate on subsequent uses of the #ashcloud hashtag during the eruption of Grimsvötn in 2011 and Puyehue in 2011.

Due to the ash emitted from the eruption of Eyjafjallajökull, a majority of European flights were cancelled from April 14, 2011 to April 20, 2011 due to closed airspace. During this time period, social media served an important role in providing timely information to passengers dealing with flight cancellations and delays when several call-centers were down from unprecedented traffic. This eruption was entirely unforecasted and the effects were widespread across northern European airlines. The International Air Transport Association (IATA) estimated that airlines faced lost revenue upwards of \$1.7 billion.

The unforecasted nature of this crisis required that airlines be reactive without a planned strategy, and responsive to quick developments in the situation. To this effect, airlines adopted the Twitter hashtag #ashcloud as the official common reference for all airlines to provide information about the volcano. #ashcloud was first developed and used by JL Pagano, an Irish passenger to communicate personal information about the eruption. Users of this hashtag include KLM, Lufthansa, Air Baltic, and British Airways.

The dataset for tweets about Eyjafjallajökull using the #ashcloud hashtag had the highest *engagement*, with 73% of the tweets directed at specific accounts with the @ sign. While many airlines adopted the hashtag, only 12% of the tweets in this dataset were from airlines, with 46% of the activity by reporting agencies.

#### 8.2 #Ashcloud 2011

The #ashcloud hashtag was resurrected in May and June of 2011 when two unforecasted volcanic eruptions occurred resulting in closed airspace and cancelled flights worldwide. The Grimsvötn volcano in Iceland erupted on May 21, 2011 the Puyehue volcano in Chile erupted on June 4, 2011.

## 8.3 Grimsvötn Volcanic Eruption

Due to ash from Grimsvötn, approximately 252 flights were cancelled on May 21, with the greatest disruptions in North Western Europe. <sup>28</sup> In total, over 120,000 passengers were affected over the course of 16 days. BBC News reported that the following airlines were forced to cancel flights due to the ashcloud from Grimsvötn: British Airways, KLM, Aer Lingus, Flybe, BMI, Loganair, Eastern Airways, Easyjet, and Ryanair. <sup>29</sup> Of these airlines, Easyjet was the most frequent tweeter using the #ashcloud hashtag. Easyjet utilized Twitter to maintain constant communication with consumers throughout the May 2011 volcanic eruption.

 $<sup>^{28}\</sup> http://www.telegraph.co.uk/news/worldnews/europe/iceland/8532715/Iceland-volcano-ash-cloud-UK-flight-disruption-continues.html$ 

<sup>&</sup>lt;sup>29</sup> http://www.bbc.co.uk/news/uk-13513981

Bloomberg speculated that airlines that provide long-haul trans-Atlantic routes, namely British Airways and Virgin Atlantic, would suffer the largest profit losses. <sup>30</sup> Virgin Atlantic responded to such speculation by tweeting "The #ashcloud is not affecting UK airspace & all VS flights are operating as scheduled, for the latest see http://tinyurl.com/42bl2pl."

Of the three volcanic eruptions, this eruption was best handled by the airlines with less overall disruption, though this eruption had the greatest intensity. The dataset of responses using the #ashcloud hashtag about this eruption had the highest *reach* (48.5) and *usefulness* (4.48) amongst the volcanic eruption datasets. There was also greater activity by airlines, with 23% of tweets by airlines, than with the Eyjafjallajökull eruption. However, the effect of a different government regime, experience with the previous eruption, and authorities' better assessment of the risk created by the ash cannot be disregarded as adding to the crisis management success.

#### 8.4 Easthaugh House

With this eruption, hotels took the opportunity to direct traffic to their businesses by tweeting about vacancies for grounded travelers. For example, Easthaugh House, a boutique bed and breakfast tweeted "Stranded in Scotland? We'll provide free accommodation (must have flight details as proof) Hope this helps! We're 1hr from Edin. #ashcloud" This shows how a business only peripherally related to the eruption used the #ashcloud tag to effectively target new customers and capitalize on this opportunity to capture a greater market share. This tweet generated 110 retweets and 32 retweets by influential people, which in comparison to the rest of the tweets regarding the eruption had much greater traction. The reach (110) of this tweet was

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 $<sup>^{30}</sup>$  http://www.bloomberg.com/news/2010-04-16/british-airways-virgin-atlantic-may-suffer-most-from-iceland-s-ash-cloud.html

approximately one standard deviation greater than the average *reach* (48.5) for the dataset, as well, the *impression* (32) was about two standard deviations greater than the average *impression* (7.67) for tweets in this dataset.

## 8.5 Puyehue Volcanic Eruption

On June 4, 2011, Puyehue, a volcano in Chile, erupted for the first time in 50 years. This eruption closed airspace in the Southern Hemisphere, affecting flight plans of over 100,000 passengers. Qantas Airways alone suffered upwards of \$21 million in losses from the eruption.<sup>31</sup>

Airlines were most active during this volcanic eruption, with tweets from airlines comprising 78.5% of all tweets in this dataset. In particular, Qantas Airways was the most frequent tweeter for this dataset. Qantas Airways timely responses warranted the airline a finalist spot in Simplifying.com's Annual Excellence in Social Media Awards. Qantas Airways came third, with 12.11% of the votes, for the category "Best use of social media for customer service/ crises management." First and second place went to AirAsia (50.76%) and SAS Scandinavian Airlines (20.95%) respectively, for their superior customer service via social media. Qantas Airways broadcasted this nomination on Twitter with the tweet, "We are in the running for a social media award for our #ashcloud efforts, please vote for us (if u think we deserve it)

http://t.co/CyTQjmv." This tweet received minimal following, retweeted only six times, once by an influential person, and favorited only once.

<sup>&</sup>lt;sup>31</sup> http://www.dailytelegraph.com.au/news/national/second-volcanic-ash-cloud-coming/story-e6freuzr-1226080217491

 $<sup>^{32}\</sup> http://simpliflying.com/2011/2nd-annual-simpliflying-awards-in-social-media-excellence-\%E2\%80\%93-vote-now-for-best-airlines-airports-hotels/$ 

The timing of Qantas Airways' enhanced activity for this eruption is not haphazard. Increased Qantas Airways' social media activity indicates additional resource allocation to the social media division. Qantas' efforts during this eruption can perhaps be seen as a strategic first foray in social media communication and a social media for crisis management "test-run" in anticipation of the labor lockout later in October.

In their 2011 Annual Review Report, Qantas Airways mentioned the Puyehue volcanic eruption as a social media case study but did not mention neither their social media use during the grounded fleet nor the #QantasLuxury contest. Qantas Airways makes clear their stance on social media with the following mention:

"The feedback on Qantas' use of social media during the disruption was excellent, and the Group plans to bolster its resources further with the employment of dedicated social media employees in the customer care department. Social media can only complement, never replace, the essential customer service work done by airport and call centre staff, but it is a powerful new customer communication tool." <sup>33</sup>

With each subsequent volcanic eruption, an increasing percentage of airlines adopted the hashtag and sentiment of the tweets became increasingly less negative, pointing to the successful application and use of #ashcloud. 34

# 8.6 Crisis of Choice vs. Unforecasted Crisis

Though the fundamental scale of the Qantas Airways fleet grounding crisis and the volcanic eruptions are vastly different, the relative characteristics of these crises make them appropriate comparisons. These crises compare corporate crises that can be traced back to corporate actions

Qantas 2011 Annual Review Report
 Refer to Figure 3 and 4 in the Appendix

and corporate crises that are completely unanticipated. As Qantas Airways planned the labor lockout, they also had the opportunity to create a premeditated social media strategy to communicate with consumers. On the other hand, the unforeseen eruption of Puyehue in June 2011 did not allow Qantas Airways to prepare a strategy beforehand, but rather required Qantas Airways to act impromptu, using existing resources to address distressed consumers.

While Qantas Airways was commended for their efforts during the Puyehue eruption for the company's effective utilization of social media to disseminate information and communicate with consumers, Qantas Airways' management of the grounded fleet and #QantasLuxury contest were considered public relations failures.

Tweets in the unforecasted crises datasets are significantly less negative than the other two datasets. In particular, with each subsequent application / use of the #ashcloud hashtag, the sentiment of the datasets is less negative (from 23.1% negative, to 7% negative, and finally to 0% negative.) Furthermore, these datasets are significantly neutral in tone, with 57.7% of neutral tweets in 2010, 79% neutral in 2011 Europe, and 71.4% neutral in 2011 Chile. Perhaps this points to the success of the #ashcloud hashtag application, as the motive for the #ashcloud hashtag was to provide unbiased timely situational updates via Twitter. Therefore the neutrality of the tweets indicates successful communication utilizing this hashtag.

# IX. Discussion, Implications and Conclusion

<sup>&</sup>lt;sup>35</sup> The 2010 volcano was 23.1% negative, 57.7% neutral, and 19.2%. The 2011 European volcanic eruption was 7% negative, 79% neutral, and 14% positive. The 2011 Chile eruption was 71.4% neutral and 28.6% positive.

Qantas Airways' #QantasLuxury contest turned into a corporate crisis with material erosion to Qantas Airways' corporate brand. Had Qantas Airways launched the contest at a more appropriate time, been sensitive to their audience, and been flexible about their social media campaign, Qantas Airways would not have tarnished their corporate image and reputation as they did. This again reiterates the explosive potential of Twitter and tweets gone viral.

Next, as the Qantas Airways case and volcanic eruption cases illustrate, there are many objectives that corporations can accomplish by utilizing Twitter at a time of crisis. However, how effectively these objectives are met are a function of the appropriateness of the chosen strategy. The #QantasLuxury Contest was launched much too soon after the fleet grounding, and also showed an insensitivity to those Qantas Airways had inconvenienced. This suggests the importance of timing and audience sensitivity. A generic strategy and/or a single means to address crises via Twitter cannot be prescribed. This paper shows that there is not a single best method or practice that can be prescribed to address all crises. Each social media-based crisis management strategy must be catered to the situation and flexible. Most importantly, social media-based strategies must be knowledgeable about their audience and the audience's expectations. By recognizing what the audience wants, the corporation should adjust the strategy to their demands, and not be mutually exclusive to any one dimension of crisis management. Proactive action and strategy malleability serve as important social media lessons for not only the airline industry, but also other service industries.

As well, the companies (i.e. Virgin Australia and the Easthaugh House) that were able to take advantage of other corporations in crisis suggest that companies have a lot to benefit from

monitoring the social media activity of their competitors. Furthermore to stay competitive, social media teams of companies should actively target audiences of key competitors, particularly in crisis scenarios. Therefore, findings through tweet metrics, sentiment analysis, and situational context show that effective corporate crisis social media strategies set clear objectives, are sensitive to target audiences, accurately anticipate reactions, and are malleable to changing circumstances.

## X. Limitations and Further Research

A major limitation of this study is the reliance on the topsy.com database for a comprehensive log of tweets. The accuracy and comprehensiveness of the log is slightly questionable as can be noticed by the little recollection of the tags from the first volcanic eruption, but the extensive coverage of the volcanic eruptions in 2011.

Other interesting crisis episodes that I considered analyzing through social media but ruled out were the NBA lockout, bankruptcy of MF Global, recent JetBlue pilot firing, and Goldman Sachs Editorial crisis. Further research should focus on social media use across industries, and across various platforms. Moreover, as presence on social media platforms is not mutually exclusive, research should look to analyze cross-platform effects and whether strategies should focus attention to one platform, or aim to provide mass outreach through multiple platforms. Research should try to answer whether communication through more social media outlets, and thereby widespread exposure, provides for a more effective social media strategy, or if a more focused strategy targeting one outlet is more effective.

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# Appendix

Figure 1. Key Metrics Definitions

Metric	Definition		
Reach	The number of times a tweet is retweeted		
Usefulness	The number of times a tweet is favorited		
Tweet Impression	The number of times a tweet is retweeted by an influential user		
Tweet Informativeness	The number of times a tweet was retweeted for every time it was retweeted		
Tweet Diversity	The number of distinct tweeters		
Engagement	The percentage tweets that direct conversation by using the "@" sign		

Figure 2. Key Metrics Results

	(tweets)	Reach	Usefulness	Impression	Informativeness	Engagement (%)
Qantas Official	Average	172.38	18.13	8.88	18.06	0.00
	St. Dev	54.75	16.10	3.68	14.40	
Public Response to	Average	222.28	12.24	11.08	21.93	7.7
Grounded Fleet	St. Dev	264.70	10.26	12.98	20.08	
#QantasLuxury	Average	33.46	4.39	3.58	10.02	22.2
	St.Dev	55.71	6.19	4.08	4.94	
2010 Eyjafjallajökull	Average	31.67	4.14	7.42	15.11	73.1
Eruption	St.Dev	67.10	4.61	12.97	20.59	
2011 Grimsvötn	Average	48.50	4.48	7.67	14.90	2.5
Eruption	St.Dev	75.35	5.12	10.04	11.55	•
2011 Puyehue	Average	20.67	2.70	3.93	8.91	7.1
Eruption	St.Dev	24.35	1.77	3.73	5.75	

Figure 3. Tweet Diversity Results

Tweet Diversity (%)	% Reporting Agencies	% Individuals	% Airlines
Qantas Official	NA	NA	NA
Public Response to Grounded Fleet	25.0	69.0	6.0
#QantasLuxury	2.2	94.5	3.3
2010 Eyjafjallajökull Eruption	46.2	42.3	11.5
2011 Grimsvötn Eruption	60	17.5	22.5
2011 Puyehue Eruption	7.1	14.3	78.6

Figure 4. Sentiment Analysis Results

Sentiment Analysis (%)	% Negative	% Neutral	% Positive
Qantas Official	0.0	100.0	0.0
<b>Public Response to Grounded Fleet</b>	42.3	42.3	14.4
#QantasLuxury	63.3	20.0	16.7
2010 Eyjafjallajökull Eruption	23.1	57.7	19.2
2011 Grimsvötn Eruption	7.0	79.1	13.9
2011 Puyehue Eruption	0.0	71.4	28.6

Figure 5. Uclassify.com Results

UClassify.com Coding (%)	% Negative	% Positive
Qantas Official	26.8	73.2
<b>Public Response to Grounded Fleet</b>	44.2	55.8
#QantasLuxury	54.8	45.2
2010 Eyjafjallajökull Eruption	47.0	53.0
2011 Grimsvötn Eruption	56.8	43.2
2011 Puyehue Eruption	67.9	32.1

Figure 6. Stock Prices During Qantas Airways' Grounded Fleet

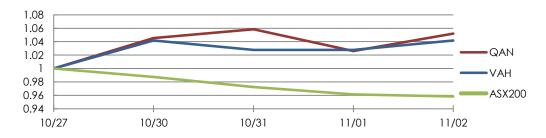


Figure 7. Stock Prices During Qantas Airways' #Qantas Luxury Contest

