

What are they tweeting and why?: Corporate Twitter use in Australia and the USA

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Abstract

This study compares and contrasts use of Twitter, the most common micro-blogging medium, by six Twitter accounts linked to three Australian and three US organisations. Quantitative and content analyses were performed on a sample of 1,194 tweets posted over a period from 6 December 2009 to 27 May 2010. The results show that while two-way communications were the most common form of tweets by all accounts, there was evidence of very different Twitter practices between the organisations, and some evidence of different practices within the organisations. The results provide a framework for organisations and researchers to compare Twitter practices, in order to identify the best Twitter strategy for different organisations.

Keywords: Twitter, microblogging, interactive communications

Introduction

Twitter is the most commonly used microblogging service, with 100 million users worldwide (Williams, 2010), and recent growth which has been described as ‘explosive’ (Lefkow, 2010). Twitter use is greatest in the USA, with 62.1% of all Twitter users, with Australia the fourth largest user of Twitter, with 2.8% of users (Cheng, Evans, and Harshdeep, 2009). There has been substantial research into how and why individuals use Twitter (e.g. boyd (sic), Golder, and Lotan, 2010; Gruz, Takhteyev, and Wellman, 2010; Honeycutt and Herring, 2009; Morris, Teevan, and Panovich, 2010). However there have been only a few studies on the use of Twitter by organisations, including studies of Twitter use only for internal communication (e.g. Zhao and Rosson, 2009). In an organisational context, Twitter has been described as an online listening tool (Crawford, 2009) and as a means of crowdsourcing (Ehrlich and Shami, 2010). Twitter’s greatest potential for organisations, however, is arguably for *external* communication, but very few peer-reviewed studies have analysed this usage: in this context, Twitter has been described as a tool to create electronic word of mouth (Jansen et al., 2009b), as a viral marketing mechanism (Asur and Huberman, 2010) and as a form of online word of mouth branding (Jansen et al., 2009a; Jansen et al., 2009b). No peer-reviewed studies, however, have compared use of Twitter by different organisations, or contrasted the use of Twitter in its largest market, the USA, and in a smaller Twitter market such as Australia (even after allowing for the smaller Australian population). As a result, we analyse the use of Twitter for external communication by three commercial organisations, and contrast Twitter use by those organisations within their US and Australian markets.

Methodology

Since the Twitter strategy of an organisation is likely to vary with the customer’s involvement with the product (and thus with their presumed interest in following related tweets), three companies’ Twitter accounts were chosen for analysis: Dominos Pizza (representing a low involvement, tangible product), Billabong (a board sports and leisure clothing company, representing a product assumed to be medium or higher involvement) and Cosmopolitan

magazine (also known as Cosmo), a monthly magazine targeted at females (representing a low to moderate involvement, information-based product). Each of the three brands has Twitter accounts based in the USA and Australia, allowing a comparison of Twitter usage by the brand across the two countries. The brands also represent different corporate structures i.e. Cosmopolitan Australia is a subsidiary of Cosmopolitan USA; Dominos Australia is the master franchise holder for the US public company and Billabong US is a subsidiary of the Australian public company. Since there can be multiple accounts tweeting on behalf of one organisation (e.g. Billabong in Australia and in the USA have additional Twitter accounts tweeting to ‘billabong girls’), we chose for analysis the Twitter account which was nominated by the organisation as the central account, in order to best reflect any organisational policy or practice on the use of Twitter. For each of our companies, this identified one account: (‘pizza_dominos’, ‘billabong1973’, and ‘CosmopolitanAU’ for the Australian accounts, and ‘dominos’, ‘billabongusa’ and ‘CosmoOnline’ for the US accounts). All tweets from these accounts were downloaded for the period from 6/12/09 to 27/5/10¹. A random selection of 200 tweets from five of the corporate accounts was selected for quantitative and qualitative analysis. One account (Billabong US) sent only 194 tweets during the data collection period, so all 194 tweets were used for analysis. The quantitative component of the analysis recorded frequencies and made comparisons using a Z test of binomial proportions. The qualitative analysis classified tweets using a model of public relations (Grunig, 1990) which has been adapted for classification of tweets (Edman, 2010), to identify common themes in the data.

Results

Table 1 shows the total number of tweets by each account as at 27/5/10, the growth in tweets over the preceding ten-week period (% change) and the efficiency of tweets (assessed by the ratio of followers to tweets sent). Surprisingly, given the lower rate of Twitter usage in Australia, two of the three Australian accounts had more tweets than their equivalent US accounts, suggesting that Australian corporate use of Twitter is comparatively more advanced than that of the Australian population. The table also indicates large variations in the efficiency of tweet communication, with CosmoUS being the most efficient, with 35.5 followers for every tweet sent, compared to the least efficient, Dominos, with an average of 3.5 followers per tweet across its two accounts. The ratio of followers at one date to total tweets sent will under-estimate efficiency of communication at any one point of time, but the low number of followers of some accounts, relative to the number of tweets sent, does suggest that a significant amount of corporate time may be being invested in communicating with a relatively small number of followers.

Table 1: Number of tweets, change, and efficiency score as of 27 May 2010

Company	No of tweets		Followers		Efficiency: Followers to tweets
	N	%change	N	% change	
Dominos Aus	866	15.7	3,140	11.9	3.6
Billab Aus	1215	12.0	11,792	11.0	9.7
Cosmo Aus	1894	16.0	8,046	13.0	4.2
Dominos US	3829	17.5	13,060	16.0	3.4
Billab US	478	11.0	4,779	23.9	10.0
Cosmo US	1156	43.0	41,028	22.0	35.5

The number of followers of any account may, however, be a misleading indicator of the influence of a Twitter account, since it does not show the level of engagement of any of those followers with the account (Cha et al., 2010). As a result, a measure of an account’s interaction with followers, the percentage of tweets that consist of replies, is shown in Table

2. In the context of website interactivity, this measure has been called *reactivity* (Sundar, Kalyanaraman, and Brown, 2003). Table 2 also shows the percentage of retweets (forwarded tweets), since retweets have been said to indicate a company's participation in a diffuse conversation, and thus its desire to engage with others (boyd (sic) et al., 2010), and also shows the number of tweets including hashtags. (Hashtags are a convention allowing users to create and/or follow a thread of discussion by prefixing a tweet with a '#' character (Kwak et al., 2010), thus increasing a tweet's conversational function (Huang, Thornton, and Efthimiadis, 2010). Hashtags are also a mechanism to create or respond to trending topicsⁱⁱ). By referring to and contributing to ongoing discussions, tweets with hashtags can therefore be classified as having *high interactivity*, according to Sundar et al's (2003) classification of website interactivity, indicating a response which alludes to earlier communications. Using these measures of reactivity/interactivity, Dominos was the most reactive account, with 86% of US and 67.5% of Australian tweets consisting of responses. In contrast, Cosmo US was the most interactive, with 23% of its tweets containing hashtags. It is notable that Australian use of hashtags by all accounts was significantly lower than US use ($Z = 5.8, p < 0.001$), possibly reflecting that Twitter does not currently allow identification of trending Australian topics on its website, making it harder for Australian accounts to tap into trending local topics.

Table 2: Type of post

Company	Reply	Retweet	Hashtags	Total
Dominos Aus	135 (67.5%)	0 (0%)	17 (8.5%)	200
Billab Aus	16 (8%)	20 (10%)	3 (1.5%)	200
Cosmo Aus	51 (25.5%)	0 (0%)	5 (2.5%)	200
Dominos US	172 (86%)	5 (2.5%)	15 (7.5%)	200
Billab US	5 (2.6%)	14 (7.2%)	20 (10.3%)	194
Cosmo US	37 (18.5%)	10 (5%)	46 (23%)	200
Total	416 (34.8%)	49 (4%)	106 (8.9%)	1,194

Twitter accounts may also attempt to achieve interactivity by linking to other sources: Sundar et al (2003) classified as 'medium interactive' websites linking to another site without a reciprocal link, but did not differentiate between internal links (i.e. those linking to the company website) and external links. For a corporate Twitter account, the difference is important: a weblink may point to a company's own website(s) (classified here as an internal link) and thus help to increase traffic to the site, or to another external website (classified here as an external link). Table 3 compares the percentage of internal and external links used by the six accounts, showing a consistently high use of internal links by both Cosmo accounts, with at least four internal links for every external link. In contrast, Billabong used external links significantly more than the other companies ($Z = 30.0, p < 0.001$), and Dominos used a significantly lower level of internal or external links ($Z = 15.5, p < 0.001$).

Table 3: Tweets with links to company website (internal) and external (non company) links

Company	Internal link	External link	Total links
Dominos US	20 (10%)	11 (5.5%)	30 (15%)
Billab US	61 (31.4%)	91 (46.9%)	151 (77.8%)
Cosmo US	81 (40.5%)	6 (3%)	85 (42.5%)
Dominos Aus	26 (13%)	13 (6.5%)	39 (19.5%)
Billab Aus	78 (39%)	69 (34.5%)	146 (73%)
Cosmo Aus	64 (32%)	16 (8%)	80 (40%)

The sampled tweets were also coded for content, using a model of public relations developed by Grunig (1990), and adapted by Edman (2010) for classification of tweets. This classification results in four types of tweets: press agency, (one way communication, using

persuasive language); public information (factual information); ‘two-way asymmetrical’ (tweets advocating feedback or promoting a company product) and ‘two-way symmetrical’ (two-way tweets managing conflicts, or reflecting casual two-way conversations). The results are shown in Table 4. Previous research has argued that two-way symmetrical communication is crucial to forming relationships with publics (Grunig, 1990; Grunig and Grunig, 2000). Consistent with this view, this form of communication was the largest category for all six accounts. However reflecting its high reactivity level, Dominos’ use of two-way symmetrical tweets was significantly higher than all other accounts ($Z = 4.3, p < 0.001$). In contrast, Cosmopolitan, while like all accounts dominated by two-way symmetrical communication, had the highest level of press agency posts, a large percentage of which used persuasive language encouraging linking to the magazine’s website.

Table 4: Tweet content classification (based on Grunig, 1990)

Account	Press Agency	Public Information	Two-way asymmetrical	Two-way symmetrical	Total
Dominos Aus	33(16.5%)	11 (5.5%)	10 (5%)	147(73%)	200
Billab Aus	15 (7.5%)	65 (32.5%)	10 (5%)	110 (55%)	200
Cosmo Aus	48 (24%)	21 (10.5%)	2 (1%)	129 (64.5%)	200
Dominos US	7 (3.5%)	14 (7%)	0 (0%)	179 (89.5%)	200
Billab US	13 (6.7%)	83 (42.7%)	0 (0%)	100 (51.5%)	194
Cosmo US	72 (36%)	16 (8%)	11 (5.5%)	101 (50%)	200
Total	188 (15.7%)	210 (17.5%)	33 (2.76%)	766 (64.1%)	1,194

Further analysis of the tweets’ content suggested different use of Twitter across the three companies, and some evidence of different practices *within* them. Consistent with the high level of reactivity discussed above, Dominos appeared to use their Twitter account as a response channel, resulting in a large number of tweets recognising complaints, but directing the individual to a company’s website e.g. “@SusquCyclist Sorry to hear that. Can you let our customer care team know where this was: <http://bit.ly/3vszZ>”. For Dominos US, there was some evidence that an unexpectedly high number of tweets stretched available resources: ‘@dasn101 As much as we’d like to we simply can’t respond to every @dominos message but we try to do so to all who have questions or problems’. In contrast, both Billabong and Cosmo appeared to use Twitter to increase engagement with the company and related products, with all four accounts containing a large percentage of tweets providing information and links to related sites. For example, Billabong sent a large number of tweets reporting news on surf competitions e.g. ‘Billabong ASP World Juniors Women’s Quarters ON, Men on Standby LIVE @ <http://www.billabongpro.com>’. Cosmo USA was also characterised by the highest use of hashtags to link into trending topics and build internal website traffic e.g. “#LadyGaga is going on tour! Get the details here <http://bit.ly/cJKjPI>”. The Australian Cosmo account, conversely, had low levels of hashtag use, and lower use of internal weblinks, instead being characterised by a large number of tweets indicating casual conversation about local office issues, e.g. ‘aw! our intern chloe bought me a red velvet cupcake for my birthday! thanks chlo x’. This behaviour might perhaps reflect early use of Twitter as a status-updating tool, but the difference in Cosmo’s two sites does suggest a lack of consistent strategy in its use of Twitter.

Discussion

In an era where many organisations are experimenting with Twitter, but where there is little evidence on what is best practice to guide corporate approach to Twitter, the results provide useful data contrasting the use of Twitter across different companies, and within different companies, and provide a model for future analysis of corporate Twitter practices. There is no doubt that the importance of Twitter as an external communication medium is growing: over

the period studied, all companies experienced an increase in followers, reflecting the growing popularity of Twitter. Beyond analysis of the number of followers, however, a comparison of the content of tweets by the six accounts reveals very different Twitter practices: for example, 78% of tweets from Dominos consisted of responses, in many cases replying to tweets which were not apparently sent to Dominos, suggesting that Dominos is using Twitter as an online listening device (Crawford, 2009). While this strategy clearly has the potential for effective service recovery, it means that the company repeatedly exposes the company's followers to other customers' service problems, and creates clutter in Dominos' Twitter feed e.g. '@rickads Hi, Sorry to hear about ur pizzas. Pls DM us which store & ur contact details so the franchisee can contact u to apologise'. Jansen et al (2009b) have suggested that organisations should use multiple Twitter accounts for different purposes, and the Dominos example suggests that service recovery tweets might be better sent from a secondary account, to avoid repeated public demonstration of service problems.

In contrast to Dominos' predominance of reactive tweets, Billabong appears to be following what Grunig (1990) called a public information model, with its feed dominated by links to external and internal websites. This means that both Billabong accounts provide a stream of information relevant for its target audience (e.g. links to the results of competitions, often sponsored by Billabong), but the high percentage of external links (especially for the US account) means that Billabong risks pushing customers to an external site, rather than deepening its relationship with customers by links to its own sites. The US Cosmo account, in contrast, appears to be following what Grunig (1990) called a press agency model, using hashtags to tap into and initiate emerging topics, linked with persuasive communication to direct followers to the Cosmo website, with obvious success: one tweet from the company stated: '*cosmopolitan.com reached 4 million unique users! the most we've ever had (& the most of all Hearst sites) Thanks to all of u for clicking!*' The content analysis also suggests that different organisations are pursuing different strategies in their use of Twitter. While this is not surprising, the very different practices across organisational accounts in different countries suggest a lack of clear and consistent Twitter strategy by organisations. Further research would be valuable to explore possible reasons for this lack of consistency, and to investigate which Twitter practices might be most useful under different circumstances.

Conclusion

While all organisations' tweets were dominated by what has been classified as two-way communication (Grunig, 1990) the results show clear differences in Twitter practices between companies. The strategy employed by each of the three companies (though with varying levels of consistency across accounts) represent good examples of models which have been identified in literature examining website design (Sundar et al., 2003) and in describing different public relations strategies (Grunig, 1990). Since this study involved analysis of only six corporate accounts, generalising results to other organisations using Twitter is difficult. However the results do show growing use of Twitter by organisations, and show evidence of divergent Twitter strategies. A lack of consistency across company accounts, however (e.g. in the use of weblinks and hashtags) suggests that organisations themselves are not sure of their best Twitter strategy. There is a need for further academic research exploring different Twitter strategies, to provide better guidance to organisations on optimising their use of Twitter. The results from this study can be used as a framework for the further study of organisational Twitter practice, and as a benchmark for further company comparisons.

ⁱ Using the address http://twitter.com/statuses/user_timeline/twitter_id.xml?count=count&page=page_number

ⁱⁱ The most common words or phrases posted by users, displayed prominently by Twitter on its website.

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