Interactive or reactive? Marketing with Twitter

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The Authors

This research was conducted while Alena Soboleva was a postgraduate student at Macquarie Graduate School of Management.

Purpose

Despite rapid growth in organizational use of Twitter, there is little theoretical or empirical research examining how different organisations use Twitter. This paper aims to analyse and compare use of Twitter in 12 accounts held by six organisations in the USA and Australia, drawing on existing models of interactive communications.

Design/methodology/approach

The results demonstrate different ways in which the interactive capabilities of Twitter can be used to communicate with customers. However by also demonstrating lack of consistency in Twitter practice within most organisations, the results reinforce the need for strategic consistency in developing Twitter practice.

Research limitations/implications

The results are based on the Twitter practice of 12 organisational accounts in the USA and Australia from December 2009 to May 2010. As with any evolving medium, practices at the different organisations may have changed since that time.

Originality/value

The paper is the first to compare Twitter use within and across organisations and geographic markets. It demonstrates a variety of potential Twitter practices, and discusses the advantages and disadvantages of different strategies, and thus provides a framework for analysis of Twitter practice, and strategic direction for organisations developing their use of Twitter. The paper identifies challenges in the use of Twitter as both a one-to-many, and also a one-to-one, communication medium, and suggests strategies for coping with this dual use of Twitter.

Article Type: Research paper

Keyword(s): Twitter; interactivity; Microblogging; Social media; United States of America; Australia; Marketing.

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1. Introduction

The growth of new digital media in the first decade of the twenty-first century has seen a transformation of marketing communication, with 94 per cent of marketing executives responding to a 2010 survey indicating that they expect to spend more on social media over the following three years (Busby et al., 2010). One of the newest forms of social media is micro-blogging, most commonly associated with Twitter. Since its launch in 2006, Twitter has accumulated more than 175 million users (Twitter.com, 2011), with recent growth
One of the challenges for organisations attempting to develop an effective and efficient Twitter strategy is the lack of theoretical or empirical evidence on use of Twitter. While there has been substantial research into why individuals use Twitter (e.g. Honeycutt and Herring, 2009; Java et al., 2007), there are only a few studies on the use of Twitter by organisations, and, at the time of writing, most of these were published in conference proceedings, and no studies of organisational Twitter use were found in a search of marketing journals. Thus, despite its potential, importance for external communications, there is very little research evidence to guide practitioners in developing a cost-effective strategy for organisational use of Twitter.

Previous research into the use of Twitter by organisations has included studies of Twitter use for internal communication (Ehrlich and Shami, 2010; Riemer and Richter, 2010; Zhao and Rosson, 2009), and for research, with Twitter described as an online listening tool (Crawford, 2009) and as a means of crowd sourcing (Ehrlich and Shami, 2010). Twitter's greatest potential for organisations is, arguably, for external communication with customers, 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). Twitter is, however, different from other marketing communications media, which can be classified into inter alia, as one-to-one (e.g. e-mail), one-to-many (e.g. mass media) and many-to-many (e.g. the web and online groups) (Hoffman and Novak, 1996). In contrast, tweets by an organisation will typically be one-to-many (since the default is for all tweets to be public) but will often function as a one-to-one mechanism (when a tweet is a reply to an individual) with a potentially large audience for that tweet, since the reply will usually be visible to others. Tweets can be only one-to-one, since a private message can be sent to a follower (that is, to someone who has elected to receive tweets from the account). However this option is not available to reply to someone who is not following the organisation, so an organisation cannot reply privately to a tweet by someone who is not a follower. Thus, Twitter is perhaps unique among interactive marketing communications in that a reply to an individual (a one-to-one communication) is visible to a much larger audience, which, as will be discussed later, can result in problems with the use of Twitter as a response medium. In the next section, we review earlier research on interactive communications, and develop a theoretical framework for the analysis of organisational use of Twitter.

1.1 Twitter as an interactive communications medium

In a review of the changing role of corporate communication, Duncan and Moriarty (1998, p. 8) concluded that interactivity between the organisation and customer is a "hallmark of the paradigm shift in both marketing and communication", and that an increase in interactivity makes communication "an even more valuable element of marketing". With its potential for personalised communication with individuals who have chosen to follow an organisation's Twitter feed, Twitter clearly increases the scope for interactive communication by organisations with their customers. It is unsurprising, therefore, that more organisations are developing Twitter accounts as an additional way of communicating with customers: for example 60 per cent of Fortune 500 organisations had a Twitter account by late 2010 (up from 35 per cent the previous year), compared to only 56 per cent with a Facebook account at the same time (Barnes, 2010).

Despite growing interest in interactive communications, there is no clear agreement on the definition of interactivity (Koolstra and Bos, 2009), with a recent book stating that "an exact definition of interactivity is still being debated" (Pavlik and McIntosh, 2011, p. 69). Two contrasting interpretations of interactivity have been identified in the literature (Hoffman and Novak, 1996; Sicilia et al., 2005; Song and Zinkhan, 2008): the first, reflecting communications research, has termed the "interpersonal view" (Maccia, 2003), and sees interactivity as involving communication between individuals and/or organisations, with a continuum of interactivity ranging from non-interactive, one way communications (such as radio and television), reactive communications, when messages respond to or refer to earlier ones, and fully interactive communications, when communications incorporate preceding messages, in a process which has been described as a "related or threaded manner" (e.g. Rafaeli, 1988; Rafaeli and Sudweeks, 1997; Sundar, et al., 2003). The second view of interactivity suggests that it is based on the structure of the medium, and is typically ascribed to Steuer (1992), who defined interactivity as "the extent to which users can participate in modifying the messages they receive" (p. 84). This view has been summarised by Hoffman and Novak (1996) as "machine interactivity". Under this view of interactivity, web sites have been classified as providing different levels of interactivity, depending on the presence of features such as links, chat facilities and access to extra features such as video and audio (Coyne and Thorson, 2001; Ha and James, 1998; Macias, 2003; Sicilia et al., 2005). Research into web sites has suggested that increased interactivity is associated with higher comprehension (Macias, 2003), more information processing, higher favourability and greater flow state (Sicilia et al., 2005) and a more positive user response to the subject of the web site (Sundar et al., 2003). Increased interactivity in an online advertisement has also been associated with increased involvement with the advertisement (Fortin and Dhokia, 2005).

Twitter can provide both types of interactivity: it allows both "interpersonal interactivity" (through exchange of messages between an organisation and individual, and by referencing others' messages) and also "machine interactivity", for example through the use of embedded hyperlinks, which allow a tweet receiver to access extra information by clicking on links embedded within tweets.

Organisational tweets can therefore be classified, as we describe in the following section, as reflecting different types of interactivity. The research into interactivity in web sites discussed previously would suggest that tweets demonstrating higher levels of interactivity might lead to more positive recipient response. However organisations may have different strategic aims in their use of Twitter; variations in the use of Twitter might also arise from variations in organisational type (for example a service organisation might use Twitter differently from an organisation selling physical goods). There may also be differences in the use of Twitter in geographic markets with varying levels of Twitter usage. Duncan and Moriarty (2009) have argued that strategic consistency is critical for marketing communications, and that executional consistency is a basic premise of relationship marketing; that is, messages should be consistent and appropriate for their target audiences. While different organisations may therefore use different forms of communications, and may vary forms at different times, the principle of strategic consistency would suggest that the absence of market specific differences in strategy, organisations will use similar content mixes in their communications in different geographic markets. However, there has been very limited academic work examining organisational use of Twitter in different geographic markets. Use of Twitter is greatest in the USA, with 62.1 per cent of all Twitter users, with Australia the fifth largest user, with 2.2 per cent of users (Cheng et al., 2009). As a result, in addition to classifying tweets according to their level of interactivity, we classify and contrast the message content of tweets from comparable organisations in different geographic markets, and consider the implications for strategic use of Twitter as a marketing communications channel.

2. Methodology

Since the research aimed to examine and compare Twitter usage across two geographic markets, a variety of organisations were considered for analysis. To be eligible for study, an organisation was required to be:

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Since the research aimed to examine and compare Twitter usage across two geographic markets, a variety of organisations were considered for analysis. To be eligible for study, an organisation was required to be:
publicly owned;
- have a corporate Twitter account based in both the US and in Australia; and
- to have a minimum level of use of the account, equating to a minimum of one tweet per day (that is a minimum of 182 tweets from each account over the data collection period from December 2009 to May 2010).

Since the Twitter strategy of an organisation is likely to vary with the customer's involvement with the product (and thus with customers' potential interest in related tweets), six companies which fulfilled these conditions were chosen for analysis: three consumer goods companies (Dominos Pizza, Billabong – a surf and leisure clothing company – and Cosmopolitan magazine – also known as Cosmo, a monthly magazine targeted at females) and three primarily service organisations (Microsoft, Qantas and Virgin Mobile). The companies reflect different involvement categories, ranging from low involvement products (Dominos Pizza) to Billabong (assumed to be medium or higher involvement for its target segment) and service companies assumed to be moderate (or higher) involvement.

The brands also represent different corporate structures; Cosmopolitan Australia and Microsoft Australia are subsidiaries of US parent companies; Billabong US and Qantas US both support the US operations of Australian companies; Dominos Australia is the master franchise holder for the US public company, and Virgin Mobile is operated by separate telecommunications companies in different markets (i.e. Sprint in the US, and Optus Singtel in Australia). The companies chosen thus allow cross-country comparisons of organisations selling the same product, including those operated by the same company (Billabong, Cosmopolitan, Microsoft and Qantas) and those operated by different owners (Dominos and Virgin Mobile).

Since there can be multiple accounts tweeting on behalf of one organisation, we chose for analysis the Twitter account which appeared to be the most visible and/or central for each organisation, in order to best reflect any organisational policy or practice on the use of Twitter. For each company, this identified one US and one Australian account: “dominos”, “billabongusa”, “CosmoOnline”, “qantasusa”, “Microsoft” and “virginmobileus” for the US accounts, and “pizza_dominos”, “billabong1973”, “CosmopolitanAU”, “qftravelinsider”, “MSAU” and “virginmobileaus” for the Australian accounts. All tweets from these accounts were downloaded for the period from 6 December 2009 to 27 May 2010. A random selection of 200 tweets from ten of the corporate accounts was selected for coding and analysis. Two accounts (Billabong US and Qantas US) sent only 194 and 196 tweets respectively during the data collection period, so all of their tweets were used for analysis.

Tweets were coded to reflect the contrasting interpretations of interactivity discussed in the literature review section, thus reflecting both interpersonal and machine interactivity. First, tweets were classified relative to their interpersonal interactivity, based on levels of interactivity developed by Sundar et al. (2003), and Rafaeli and Sudweeks (1997). Tweets were classified as high-interactive, if they contained a hashtag (#) – a Twitter convention allowing users to create and/or follow a thread of discussion by prefixing a tweet with a “#” character (Kwak et al., 2010); as medium interactive when the tweet contained retweets (forwarded tweets) or “mentions” (thus referring to another user, but not replying to a particular message), and as reactive/low interactive if the tweet consisted of a reply to another tweet. Tweets, which reflected more than one level of interactivity, were coded for the highest level; that is, a tweet which contained a reply, but which also contained a hashtag, was coded as fully interactive.

To reflect the concept of machine interactivity (Hoffman and Novak, 1996), tweets were separately coded for whether they included hyperlinks, thus allowing recipients to choose to access additional material. From an organisation's point of view, a link to an organisational web site (here termed an “internal” link) serves a very different purpose from a link to an external site, the first continues organisational communication with the recipient, whereas an external link takes an individual to an external site, which may lead them to material which negates or compromises the organisation's message (Trammell et al., 2008). As a result, tweets were coded separately for internal and external links.

Coding was separately performed by two coders, and agreement reviewed. There was very high agreement (over 95 per cent) and inconsistencies were resolved by identifying errors in coding, resulting in 100 per cent agreement. Comparisons between the percentages of tweets of different types were made using Mood's median test (a non-parametric test which is appropriate for comparing distributions which are not normally distributed and which contain outliers, such as these).

3. Results

Descriptive statistics for the number of followers of each account, and the number of tweets sent by each account, are shown in Table I. Since the number of tweets sent may be a function of the length of operation of the account, the registration date for each account is also shown. Perhaps surprisingly, given the lower number of Twitter users in Australia, the median number of tweets, followers, or ratio of tweets to followers (p > 0.1). However Table I shows very large differences across all organizations in the number of tweets and in the number of followers. Differences in the number of followers are not surprising, since a service like Microsoft (whose US account had the largest number of followers) might be expected to have many more followers than a low involvement product like Dominos pizzas. However, differences in the number of followers, are not explained by the product type, since Microsoft Australia had the lowest number of followers, among all the accounts.

Table I also reveals large intra-company differences in the efficiency of organisational Twitter communication, as assessed by the ratio of followers to total tweets sent; the site with the largest ratio of followers to tweets (and thus with the highest efficiency of communication) was Microsoft US, with 93.8 followers for every tweet ever sent. In contrast VirginMobile Australia and Microsoft Australia had the lowest efficiency, with more tweets sent than followers as of May 2010. Because some people will follow for a short time, drop out and be replaced by others, the ratio of followers at one date to total tweets ever sent will under-estimate efficiency of communication at any one point of time, but the low number of followers of some organisations, relative to the number of tweets sent, suggests that a significant amount of corporate time may be being invested in communicating with a relatively small number of followers.

3.1 Interpersonal interactivity: use of replies, retweets and mentions

The interactivity of tweets, based on Rafaeli's (1988) levels of interactivity, is shown in Table II. There were again no significant differences in the median percentage of tweets in any of the three interactivity levels between US, and Australian companies (p > 0.1). More surprisingly, there was little evidence of consistent practices across US and Australian accounts from the same companies: for example Qantas Australia was the highest user of hashtags, with 60.5 per cent of its tweets containing hashtags, but only 5 per cent of the tweets from Qantas had different hashtags. There were similar patterns in the percentage of tweets which were replies to others' tweets: for example only 3 per cent of tweets by Microsoft US were replies, but 77.5 per cent of tweets sent by Microsoft Australia were replies. Microsoft and Qantas showed similar inter-country differences in the use of retweets and mentions, with Microsoft US being the largest retweeter, and Microsoft Australia one of the lowest, and Qantas Australia being the second highest retweeter, and Qantas US equal lowest.

This apparent inconsistency in practices within organisations across the two market areas is shown in Figure 1, which summarises organisational use of hashtags and tweets with replies. The figure shows a median split to differentiate organisations, which are low and high on replies, and (due to the large number of organisations which were low on hashtags) an upper quartile split to show the three
highest users of hashtags. This categorisation shows one group of organisations whose tweets were largely reactive, being dominated by replies, another group (Qantas Australia, Microsoft US and Cosmo US) which were highly interactive, being the largest users of hashtags, and another group which was low on both hashtags and replies. It is notable that the two country accounts from only two organisations (Billabong and Virgin) fell into the same group using this categorisation, and of those, Billabong’s consistent categorisation was the result of low use of either interactivity feature.

### 3.2 Machine interactivity: use of internal and external hyperlinks

| Table III shows the use of hyperlinks in tweets, or what, in the context of web sites, has been called “machine interactivity” (Hoffman and Novak, 1996). There were again no significant country differences in the use of internal and external hyperlinks (p > 0.1), and again very little evidence of any consistency within organisations across countries. For example Microsoft US and Qantas Australia were the largest users of internal links, with more than double the use of internal links of their equivalent other country site.

This apparent lack of strategic consistency in Twitter practices by the organisations is also demonstrated in Figure 2, which shows the percentage of tweets with internal and external links for each organisation. Organisations closer to the top right hand corner (Billabong Australia and Microsoft US) are highest in machine interactivity, with high use of both internal and external links. However imposition of a median split to show the six top organisations on each dimension reveals only two organisations (Dominos and Cosmo) having relative consistency of practice across the two countries, with Dominos’ consistency being caused by low use of either form of links.

### 4. Discussion

In an era where many organisations are experimenting with their use of Twitter, but where there is little evidence on what is best practice to guide corporate use, the results provide useful data contrasting the use of Twitter across and within organisations, and provide a model for future analysis of corporate Twitter practices. First, the results reveal no consistent differences in organisational Twitter use between the US, the heaviest user of Twitter, and by comparable organisations in the less well-developed Australian market, suggesting that organisational use does not reflect any differences in these two geographic markets. More surprisingly, however, the results show little evidence of consistent Twitter usage within organisations, or within those selling the same product in different geographic markets. The results thus fail to show any evidence of the strategic consistency, which has been said to be critical for marketing communications (Duncan and Moriarty, 1998). It is possible that this lack of consistency within companies is due to different organisational objectives in US and Australian markets, and Twitter communications, which have been designed to address those different country objectives. However the failure to find any consistency in Twitter usage between the US and Australia suggests that differences in intra-company Twitter use cannot be explained by country differences, and may instead reflect companies’ failure to develop strategic consistency in their use of Twitter in different markets.

A further indication that companies may not be strategically reviewing their Twitter use is provided by the low efficiency of Twitter communications by some companies. The most efficient user was Microsoft US, with over 80,000 followers, and more than 90 followers for every tweet ever sent. In contrast, Microsoft Australia had only 820 followers, which equates to less than one follower for every tweet ever sent. This relative lack of reach of tweets by Microsoft Australia and other organisations questions the return on any marketing investment in Twitter by these organisations. Microsoft Australia’s tweets were also very different in content from the company’s far more efficient US account, being largely reactive, with very low use of interactivity features such as hashtags, retweets, mentions and hyperlinks. This clear difference in Twitter content, and in efficiency of communications, suggests that the factors, which apparently led to efficient communication by the US account were not being examined and incorporated into the practices of the Australian account.

In contrast, despite a lack of common corporate ownership, Dominos was much more consistent in Twitter practice across the two accounts, with both accounts’ Twitter feed having a high percentage of replies, frequently to customer complaints, suggesting that Dominos in both countries is using Twitter as an online listening device and service recovery channel. While this strategy clearly has the potential for effective service recovery, it means that any follower or casual visitor to Dominos’ twitter feed will be confronted with a large percentage of tweets discussing, or hinting at, problems, e.g. “Sorry to hear that. Can you let our customer care team know where this was: http://bit.ly/3vszZ”.

An analysis of the different practices used by organisations thus reveals different possible Twitter strategies. Dominos’ high level of replies reflects one possible strategy: using Twitter as a response mechanism. While such a strategy allows organisations to react rapidly to customer complaints or queries, there was some evidence that a higher percentage of replies was associated with a lower number of followers, and thus with lower efficiency of reach: there was a marginally negative correlation between the percentage of replies and both the number of followers and the efficiency of communication (p=0.07 for each). It is possible that a large percentage of replies, while allowing interaction with individuals by responding to tweets, may result in Twitter content, which is uninteresting to others, and discourages followers. Thus the use of Twitter as a one-to-one response mechanism may make it difficult to develop one-to-many communications with the same account. The only account with a high proportion of replies, which was above the median level of followers, and efficiency was Qantas US. That site had the highest proportion of replies (at 91 per cent), but many replies provided information which was likely to be useful and/or interesting to other followers, e.g. “Here’s a bit for your deal-o-the-day … The Qantas Aussie AirPass is lower than ever for 4 days only! http://bit.ly/4DaySale”. 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 service recovery account, thus avoiding emphasis on problems in the main corporate account. The main corporate Twitter account can then be used for promotional and branding activities or for replies if (like Qantas’ replies) those tweets are likely to be of interest to many followers.

In contrast with the reactive approach of Dominos and Qantas US, other accounts appeared to use Twitter to increase interpersonal interaction, but in different ways: Qantas Australia, Cosmo US and Microsoft US used hashtags to relate tweets to existing conversational threads, e.g. “A Joburg local gives us some great and detailed advice on her hometown http://su.pr/1vOg8k #roadtosouthafrica #johannesburg” (thus making the tweet discoverable on two separate tweet threads, “roadtosouthafrica” and “johannesburg”, and making them more likely to be found by people for who the tweets are relevant and interesting). While there was no significant correlation between the percentage of hashtags and the efficiency of corporate communications, Microsoft US and Cosmo US (two of the three largest users of hashtags) had the two highest scores for efficiency of communication, suggesting that increased use of hashtags may, in some cases, lead to larger numbers of followers.

An alternative method of increasing interaction with one’s Twitter followers is to retweet others’ tweets, or to retweet by others. For example Microsoft US was one of the largest users of retweets and mentions, using tweets to forward tips, good news stories and favourable publicity, e.g. “TechTarget writes about how migrating to Exchange 2010 can save money on storage http://bit.ly/dwqWqY (via @MicrosoftIWT)”. Forwarding or referring to tweets by others has the dual potential advantages of communicating an apparently independent endorsement, and of creating credibility by referring to, or forwarding favourable tweets by the most influential users – those whose tweets are frequently reforwarded by others (Romero et al., 2010).

Other accounts used tweets to create what has been called “machine interactivity” (Hoffman and Novak, 1996). For example across both of its accounts, Billabong was a consistent high user of internal and external hyperlinks to provide followers with links to sites
relevant to surfing and company products, e.g. “Check out the Billabong XXL Global Big Wave Awards web cast LIVE in 45 min @
www.BillabongXXL.com !”. Both internal and external links have the potential to increase recipient engagement by providing easy
access to relevant and interesting content, unconstrained by the 140 character restriction on tweets. However, external links risk
diverting a follower to another company site. Perhaps to avoid this problem, Cosmo US appeared to have an implicit strategy of using
Twitter to build internal web site traffic, with very little use of external links. Instead, Cosmo US sent a large number of tweets using
questions about popular fashion, beauty, sex, music and TV shows to drive traffic to the corporate web site, e.g. “what does everyone
think about The Hurt Locker winning Best Picture last night at the #oscars ? should #Avatar have won?”. This strategy appeared to be
very successful in building the company's web site traffic: one tweet from Cosmo US 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”.

4.1 Managerial implications
The organisations examined here demonstrate a range of possible Twitter strategies and, as with other areas of marketing, choice of
the best Twitter strategy should depend on the organisational strategy, and on an assessment of how the organisation can achieve the
best return on its marketing investment. Measurement of the short- and long-term benefit of Twitter is not simple, but if, as some of
these organisations demonstrate, an organisational account has only a small number of followers, this should trigger a review of best
practice use of Twitter, both in other organisational markets and by other comparable organisations. However the general lack of
consistent practice that we found within organisations suggests that many organisations are not developing strategic use of Twitter
across the organisation, or learning from what works in one country, and using that to develop Twitter practice in another country.

5. Conclusion
Twitter provides an additional channel in an integrated marketing communications strategy, and the strategies employed by each of the
12 Twitter accounts examined here represent good examples of interactive strategies which have been identified in literature examining
web site design (e.g. Sundar et al., 2003). Twitter is ideally placed to provide a highly interactive one-to-many information channel,
using, like Microsoft US, a combination of retweets, hyperlinks, and hashtags to promote positive messages, especially by independent
influential individuals. Twitter can also provide easy access to information for those to who it is most relevant or interesting, by pushing
users to an internal web site (like Cosmo US). A Twitter strategy can also be reactive, using Twitter as a service recovery channel to
respond to customer complaints – both those made directly to the organisation, or those discovered by monitoring the Twitter feed.
Ideally, however, responses to customer complaints will be made through a secondary corporate account, in order to avoid damage to
the organisation's reputation by inadvertently publicising problems. The dual capacity of Twitter for one-to-one and one-to-many
communication can thus be harnessed by using the major corporate account for tweets, which build the corporate brand, and using a
secondary, lower profile account to respond to complaints.

Since this study involved analysis of only 12 corporate accounts, generalising results to other organisations using Twitter is difficult.
However the lack of consistency across company accounts revealed here suggests that many organisations themselves are not sure of
their best Twitter strategy, and are failing to apply learning from one organisational Twitter account to other corporate accounts. 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.

![Figure 1: Interactivity features: hashtags and replies](image-url)
Figure 2 Use of hyperlinks

Table I Number of tweets, followers, ranked by efficiency of reach

<table>
<thead>
<tr>
<th>Company name</th>
<th>Account registration</th>
<th>Followers</th>
<th>No. of tweets</th>
<th>No. of followers per tweet ever sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft US</td>
<td>July 2009</td>
<td>83,049</td>
<td>885</td>
<td>93.8</td>
</tr>
<tr>
<td>Cosmopolitan US</td>
<td>March 2009</td>
<td>41,028</td>
<td>1,156</td>
<td>35.5</td>
</tr>
<tr>
<td>Billabong US</td>
<td>January 2009</td>
<td>11,792</td>
<td>1,215</td>
<td>9.7</td>
</tr>
<tr>
<td>Qantas US</td>
<td>March 2009</td>
<td>2,810</td>
<td>353</td>
<td>8.0</td>
</tr>
<tr>
<td>Cosmopolitan Aus</td>
<td>February 2009</td>
<td>8,046</td>
<td>1,894</td>
<td>4.2</td>
</tr>
<tr>
<td>Virgin Mobile US</td>
<td>February 2009</td>
<td>6,602</td>
<td>5,835</td>
<td>4.0</td>
</tr>
<tr>
<td>Dominos Aus</td>
<td>January 2009</td>
<td>3,140</td>
<td>966</td>
<td>3.6</td>
</tr>
<tr>
<td>Dominos US</td>
<td>April 2009</td>
<td>13,060</td>
<td>3,829</td>
<td>3.4</td>
</tr>
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<td>Qantas Aus</td>
<td>January 2009</td>
<td>4,621</td>
<td>1,741</td>
<td>2.7</td>
</tr>
<tr>
<td>Microsoft Aus</td>
<td>May 2009</td>
<td>820</td>
<td>889</td>
<td>0.9</td>
</tr>
<tr>
<td>Virgin Mobile Aus</td>
<td>September 2009</td>
<td>952</td>
<td>1,224</td>
<td>0.8</td>
</tr>
<tr>
<td>Billabong US</td>
<td>May 2008</td>
<td>478</td>
<td>4,779</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td></td>
<td>14,699.8</td>
<td>1,705.1</td>
<td>13.9</td>
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<tr>
<td><strong>SD</strong></td>
<td></td>
<td>24,207.9</td>
<td>1301.9</td>
<td>26.9</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td>5,611.5</td>
<td>1,215.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Mood's median test (US vs Aus.)</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td></td>
</tr>
</tbody>
</table>

Table II Interactivity of tweets: interpersonal aspect

<table>
<thead>
<tr>
<th>Tweet format</th>
<th>High interactive</th>
<th>Medium interactive</th>
<th>Reactive/low interactive</th>
<th>The USA</th>
<th>High interactive</th>
<th>Medium interactive</th>
<th>Reactive/low interactive</th>
<th>Australia</th>
<th>High interactive</th>
<th>Medium interactive</th>
<th>Reactive/low interactive</th>
<th>Australia</th>
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<th>Medium interactive</th>
<th>Reactive/low interactive</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qantas</td>
<td>5.0</td>
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Table III Use of hyperlinks

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Notes
References


About the authors

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Alena Soboleva is a Community Manager at Communispace Corporation, a provider of online consumer insights communities for market research.