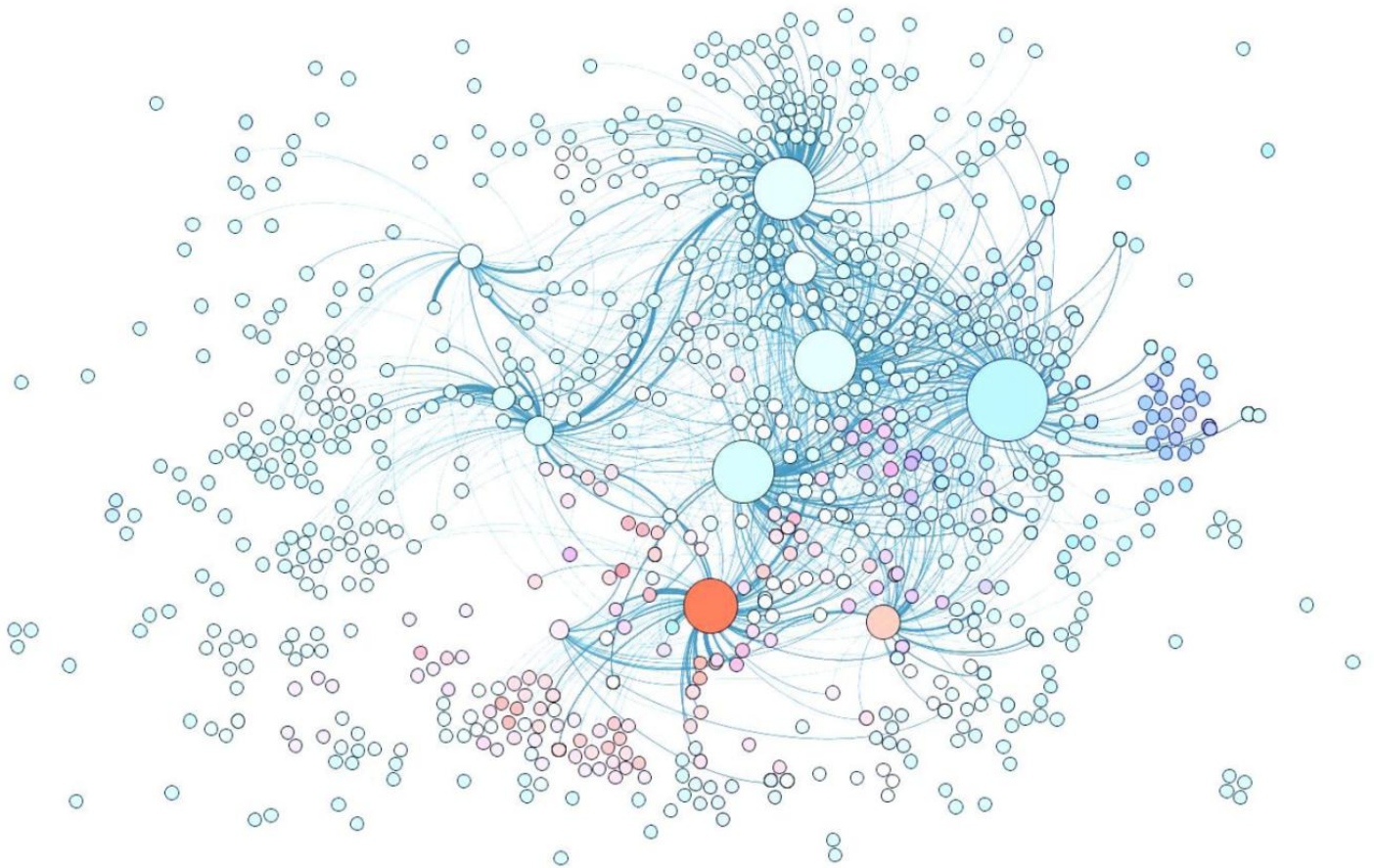


The Twitter Landscape

The changing shape of brands, consumers and the social web



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Abstract

This study explores the current state of Twitter and how brands fit within this network. The content of a corpus encompassing over **14,000** randomly selected UK tweets was manually analysed in its entirety, allowing for detailed analysis of behaviours in online communication.

Previous Twitter research has largely relied on hashtag usage, which varies between users and topics. For this reason, the current study looked beyond keyword tags to the content of public posts.

There were significant differences between male and female Twitter users. These differences extended beyond conversation topics to linguistic features. The data indicated that female authors were more prone to engaging with their immediate surroundings, while male authors tended to adopt a less real-time tone.

The findings of the study go further than descriptive figures to actionable insights. The success of a brand's online strategy lies in mapping both the behaviours of the target audience and their relationships with their own followers in turn.

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Key Findings

- **Brand names featured in 3.6% of tweets.** Female authors were more likely to mention brands than their male counterparts.
- **70% of mentions were not classified.** These ‘personal’ tweets made no explicit references to any topic or brand and were mostly deictic in nature.
- **TV, sport, music, celebrities and news headlines** were the most popular topics.
- **There was a link between brands and education/the workplace.** This finding suggested that users describing their daily routines were more likely to discuss brands.
- **Female authors engaged with their immediate offline surroundings** more frequently than males. Male authors tended to adopt a less real-time tone by comparison.
- **Male tweeters were drawn to online-orientated brands,** with a heavy focus on technology and gaming. By contrast, female authors were more likely to tweet about retail brands with web-independent offerings.
- **Authors were influenced by their followers.** This finding offered an alternative framework for understanding Twitter influence, as well as brand reputation and consumer endorsement.

1. Background

1.1 Project Aims

This study offers an overview of current trends in Twitter usage. The results, including brand mentions and consumer voice, are especially pertinent for those seeking a better understanding of online chat in relation to brand identity. Using a corpus of over **14,000 manually analysed tweets**, research aimed to fulfil the following objectives:

1. To estimate how frequently **brand names** are referenced on Twitter.

2. To estimate the prominence of specified **topic themes** including television, music, celebrity, sport, politics, literature and health.

3. To discover which, if any, **author variables** (including gender, frequency and number of followers) have an impact on 1 and 2.

4. To identify which **types of Twitter users** are most likely to mention which types of brands (using characteristics to predict likely online behaviours).

1.2 Why Twitter?

In six years Twitter has shaped the social web. Now a credible **tool for consumer engagement**, the network has come a long way from the ‘sort of “group send” SMS application’ defined back in 2006¹.

Brands are, of course, eager to keep up with the trend as hashtags appear on magazine covers and TV screens. The TV industry itself was seeing commercial potential before 2009², though the past 12 months have witnessed growth in the integration of offline and social media.

In 2012 the site saw its own commercial opportunity. Twitter introduced ‘promoted tweets’ in Latin America and Western Europe, as well as targeted ads, in a bid to grow revenues. Meanwhile, fellow social network Facebook gained publicity in the second quarter of 2012 for poor ad performance (failing to generate competitive click-through rates)³.

As brands invest in Twitter voice⁴, so the question becomes more pertinent: what is driving Twitter chat? What do behaviours say about users, and **how do brands fit within this framework?**

Twitter trends often make headlines, but counting hashtags can be misleading (BBC: 2011). Networks create their own language codes and, though we might be comfortable discussing RTs and tweetups, not all tweeters use hashtags in the same way (if at all).

Finally, brands cannot examine their online presences without contextual knowledge. Though it may be tempting to limit searches to brand names, products and channels, this ‘tunnel vision’ approach ignores conversation *surrounding* a brand. The relationship between brand and ‘non-brand’ has gained ground in recent research⁵. Actionable insights, whether external threats or potential growth, rely on **knowledge of the wider social landscape**.

¹ Arrington: 2006.

² Grossman: 2009.

³ Edwards: 2012.

⁴ Webmarketing123:2012.

⁵ Google, Inc.: 2012:31.

1.3 The Test Run

With this in mind, a test run study was orchestrated. In the preliminary study, 4,200 tweets from a sample of 60 randomly selected UK accounts were analysed between May and June 2012. Posts were categorised by topics including sports, film, music, celebrities and events.

A number of interesting findings emerged. Within the sample, females mentioned brands significantly more often than males. There was also a noticeable gender divide between the types of brand referenced. Whereas male tweeters tended to discuss electronics and online brands, their female counterparts discussed a wider range of offline brands within retail and FMCG industries.

TV, film and sport were the most frequently referenced topics. Of all tweets in the trial study, **70%** did not fall within any specified topic. These were often deictic in nature. Authors in this category typically described their current mood, surroundings or upcoming social plans. Because these had no definite referent or theme, they were labelled 'personal'.

Brand frequency was calculated by combining individual tweeter averages (see methodology). This reflected the small sample size, in which two brand-heavy accounts would have otherwise more drastically skewed the data. In addition, the findings were collected from a limited time frame. During this time specific events may have distorted the share of television, music or sport-related tweets.

The trial findings warranted a more robust study, incorporating a shallower sample (with a wider range of tweeters).

2. Methodology

2.1 Ethics

In recent years author privacy rights have made their way to the fore, sparking headlines and litigation in equal measure. Social media offers an unparalleled view of natural exchanges between users, but this monitoring is not without boundaries.

This study only makes use of texts and data which are readily available to the public. Where accounts were subsequently deleted, or else privacy settings later restricted access, all information relating to the account and its contents were removed from the study.

Within this study, the term 'personal' refers to texts which could not be categorised within the scope of the project. These were not 'personal' in the lay sense of 'sensitive' information, but rather deictic or devoid of meaningful content. As an additional measure, all Twitter accounts were anonymised.

2.2 The Sample

A sample of **1,000** UK Twitter accounts was selected for the study. As in the preliminary study, these were **selected at random**.

Random accounts were selected using a random word generator. The randomly selected words (omitting those explicitly linked to one of the topic categories) were

combined to form query strings. These were run through the Brandwatch app to identify lists of UK twitter accounts.

7 Corporate accounts, charities, events, groups and newsfeeds were removed from the sample to leave only accounts belonging to **individuals**. These were then categorised by gender (using contextual information). The numbers of account tweets, followers and following were also recorded.

Each account was next allocated a starting date. These varied between accounts and ranged between **August** and **September** 2012. Ten tweets from each account were manually analysed and categorised, creating a **sample corpus of 10,000 texts**.

This shallow sample (many accounts with relatively few tweets per account) was chosen to complement the narrower design of the test run. It also fitted a prediction supported by the trial study: that there would be high inter-account, and low intra-account, variation.

As shown in figure one (below) the random sample featured slightly more female than male authors. This imbalance was not normalised, as it reflected the **female-skewed** population of Twitter users more broadly⁶.

Figure 1: Author sample overview

GROUP	NUMBER OF TWEETS (\bar{x})			OTHER USERS (\bar{x})	
	<i>n</i>	TOTAL	PER DAY .	FOLLOWING	FOLLOWERS
ALL (\bar{x})	1,000	10,609	11.7	694	3,515
FEMALE (\bar{x})	470	12,096	14.6	707	3,493
MALE (\bar{x})	530	9,291	9.2	683	3,534

⁶ Beevolve: 2012

2.3 Categorisation

All tweets were **manually analysed** by native English speakers. Tweets were first categorised by post type: solo, reply, tag or retweet. Retweets and solo tweets (in which there were no explicit '@' appeals to other users) were differentiated. It proved more time consuming to separate tags and replies. In both post types, the author typically @ tagged another user. Replies, however, **responded** to existing conversations while tags often **initiated** exchanges. Tags also included users linking to **celebrity** accounts, or tagging their friends at **events** and locations:

'Yeay Thorpe Park with @exampleA & @exampleB'

The **topics** of all texts were also measured. Topics included television, sport, music, celebrity, news, work, education, politics, gaming, health, religion, literature and venues. Topics were not mutually exclusive, allowing for combined themes such as 'celebrity news' and 'televised sports'. If mentions did not fit one of the predefined categories they were assigned '**personal**' status. This meant that no category could be identified without further contextual cues, as in the following examples:

'The way you type is offensive; I do not respect that at all'

'Love having a local pub. Who want to join us for a drink?'

'I just saw a squirrel fall off a bin'

2.4 Manipulation

As only 10 tweets per account were recorded, calculating tweet frequencies was problematic. As a solution, within each account the date of the first tweet was subtracted from the date of the tenth (consecutive) tweet. Ten divided by this number (+1) offered an indication of tweets per day. For example, if a user's first tweet occurred on day 1, and their tenth on day 2, they were deemed to have produced 5 tweets per day.

For those with more than 10 daily tweets, a sample was manually analysed for frequency. The remaining account frequencies were calculated using the average number of tweets per day (minimum 11), varying the scores according to each 'total tweets' figure. This process allowed tweets to be weighted according to frequency, as shown in the following example:

Sample accounts *a* and *b* both tweet about a brand. However, account *a* tweets an average of five times a day whereas *b* only tweets three or four times each week. *A*'s frequency is therefore 5 and *b*'s is 0.5. This means that *a* might be expected to mention a brand ten times on average for every one mention by *b*.

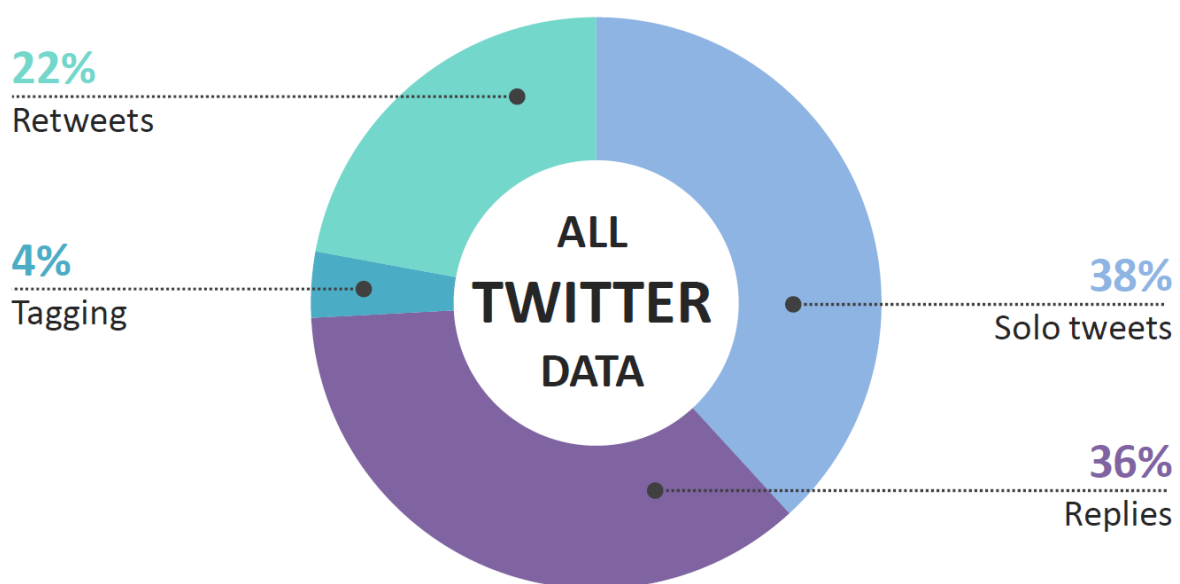
In this way, the data was weighted to account for variance in tweet frequencies. Of course frequency within each account can be expected to fluctuate over time. However, as a diachronic measure this variable went beyond the scope of the current study. A wide sample size was used to counter resultant inaccuracies.

3. Results

3.1 Tweet Types

- **38% of all tweets were ‘solo’ tweets**, making this the most common tweet type across the board. Solo tweets were defined as original content in which authors did not explicitly converse with other users via tagging or exchange sequences.
- **Retweets constituted around one fifth** of all posts.
- **Female authors were more likely to retweet** than their male counterparts.
- **Replies were more common among males** than among female authors.

Figure 2: Tweet type breakdown

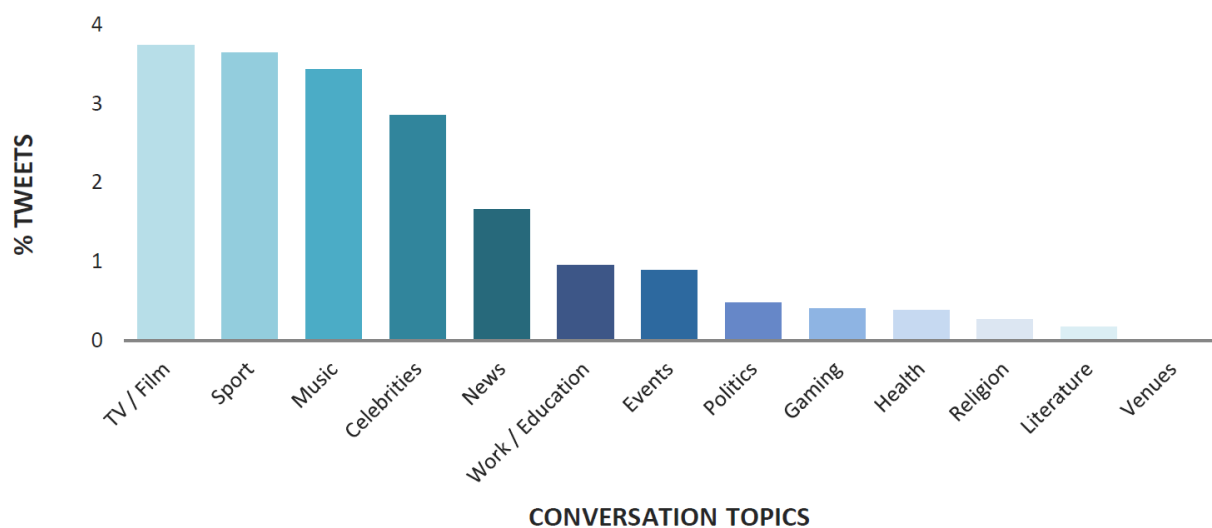


3.2 Conversation topics

Four in every five tweets were marked as ‘personal’ (79.97%). Personal tweets were those that could not be assigned one of the specified topics (above). These were often either deictic or else devoid of meaningful content. Personal tweets included birthday mentions (8%), proverbs (2%), horoscopes (3%) and dieting (3%).

Across the board **TV, sport, music, celebrities and news headlines** were the **most popular** themes of conversation.

Figure 3: Topic prominence



‘This couple on super nanny USA let their kid play with a machete!!!’

TV

‘Now I’m purchasing Gangnam style, it will be my ultimate work out song’

MUSIC

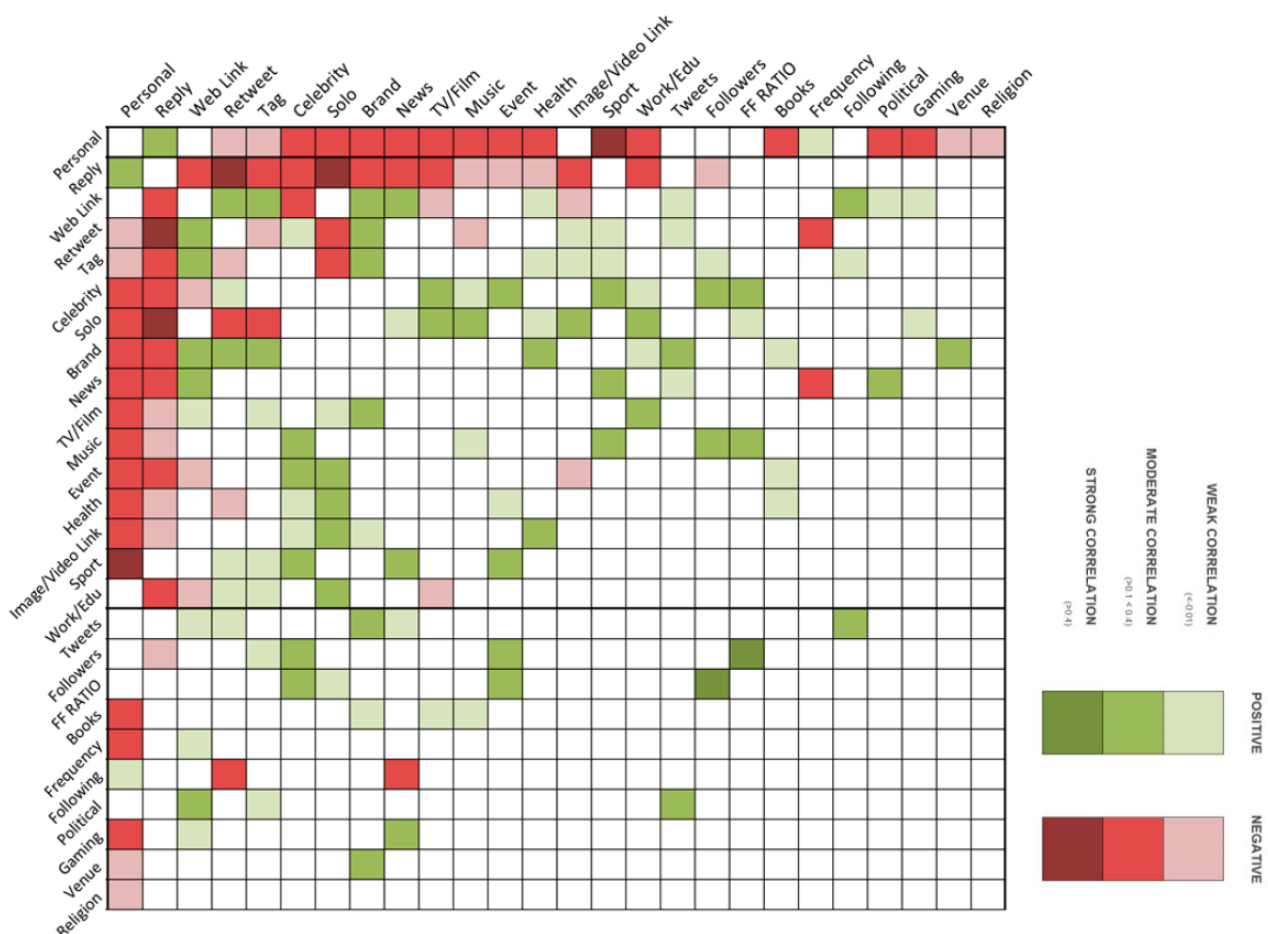
‘Germany’s wind power chaos should be a warning to the UK. Via @Telegraph’

NEWS

Once normalised (2.4), **brands were mentioned in 3.6% of all tweets** in the study. This made brand names almost as prominent as television, film and sport, and more prominent than music, celebrities or news updates. Female authors were more likely than males to mention brands (contributing 4% and 3% respectively).

All interval variables were analysed for Pearson correlation coefficients to establish links and degree of relation. Interval variables included the numbers of followers, following and tweets, tweet frequency scores, tweet type frequencies and the number of times each author included a conversation topic. Significant correlations are represented in the grid below:

Figure 4: Pearson correlation grid



Conversation topic: Television



Among television tweets, grammatical features revealed how authors used the network. The verb *watch* was salient in the data (featuring in 70% of all TV-related tweets), suggesting that the topic arose in light of the **viewer experience**.

This keyword was most prominent in the gerund form ‘*watching*’, showing **immediacy** in author tone: users were tweeting during television shows. The X Factor, the most mentioned programme in the corpus, has actively encouraged engagement on Twitter and the network is now an integral part of the show both in the UK and the US⁷. Other brands are now using The X Factor’s Twitter-active audience in interactive TV ad campaigns (Shearman: 2012). Of course not all mentions related to television sets. Mobile access and ‘on demand’ services extended television tweets to **mobile** users:

‘Watching Cheaters on Really with TV Catch-up app on my iPad.’

⁷ Hernandez: 2012.

Conversation topic: Sport



Twitter sports authors were more likely to be **male** than female. Though there were mentions echoing the recent Olympic Games, September sports conversation was dominated by other events. On September 11th Andy Murray won the **US Open**, while on September 23rd tweets were more concerned with **football** and **Formula 1** (fig. 5).

This finding continued the theme of immediacy in the data. Authors quickly turned to new events and figures at the end of sporting events. In this respect sports showed large potential for brands, but the resultant online buzz had a very brief half-life.

Future research could explore methods of sustaining online buzz in such changeable industries.

' Nicki Minaj is not better than Azealia Banks. She forfeited her rap credibility when she did Spaceship and Stupid Hoe. #NoRatings. '

The category showed potential for further analysis by way of purchase intent. There was also a divergence between users based on the ways in which they accessed music.

' My Top 3 #lastfm Artists: Joni Mitchel, Terror Danjah & Royal-T '

' My dad just said he's gunna buy Mumford & Sons new album when it comes out'

Online consumer behaviour is particularly significant for music industries, as online streaming replaces CD sales⁸. Further research in this field could identify the motivations behind user trends, with social media proving a valuable source of insight

Conversation topic: Celebrity



⁸ Imam: 2012

As with music-related mentions, **emotive keywords** were common within tweets about celebrities. During the study Justin Bieber gained coverage while the singer visited the UK. Other users expressed their sadness at the passing of presenter Terry Nutkins, or responded to the controversy surrounding John Terry's alleged use of racist language. Andy Murray, winning the US Open, also featured prominently in the data.

'Jessie J scares me. She is like the bad woman in 101 Dalmatians.'

Twitter is now seen as a key media link between celebrities and the general public. However, unlike on other networks where audience parameters can be customised by the author, Tweets are typically visible either publicly or to all approved followers. This can be said to create **audience layers**⁹. If an author tags a celebrity, they may be both ostensibly directing their comment at the celebrity account and tailoring their language to their wider audience of followers.

⁹ Marwick, Boyd: 2011

4. Analysis

4.1 Characteristics of brand authors

The language of tweeters who mentioned brands was compared with those who did not, to identify any immediate differences between the two groups. Independent samples *t* tests established significant differences ($p < 0.05$) between those who mentioned brand names and non-brand authors.

- Brand advocates were significantly more likely to also mention **work or education** than non-brand authors. **News** and **celebrities** were also more common among those who discussed brand names, though the difference was less pronounced.
- Brand tweeters were less likely to comment on **sport, music and television** than non-brand authors. They were also less likely to publicly **reply** to other users, tweeted **less frequently**, and had **fewer followers** on average.

Figure 6: Brand author and non-brand author conversation topics

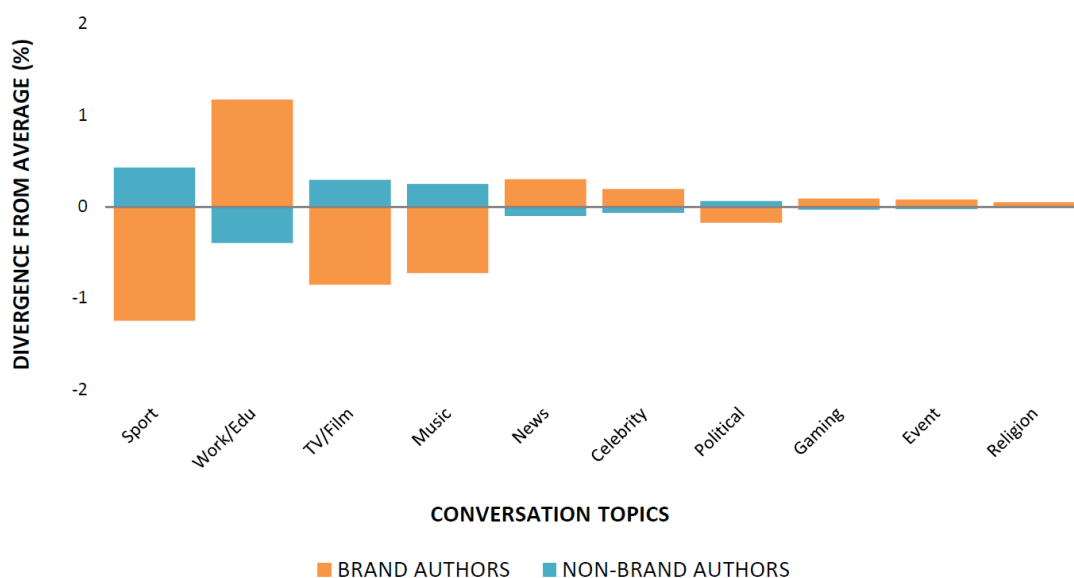
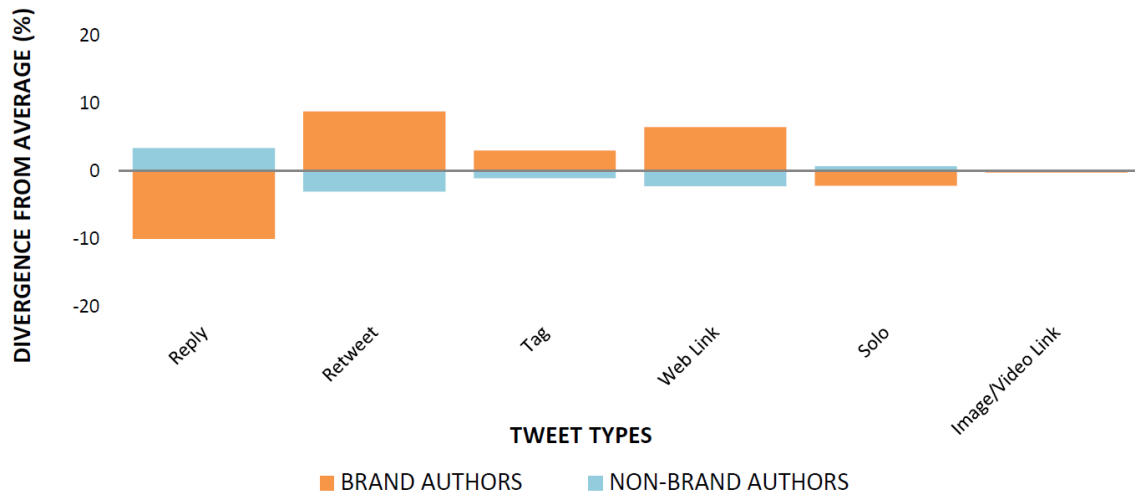
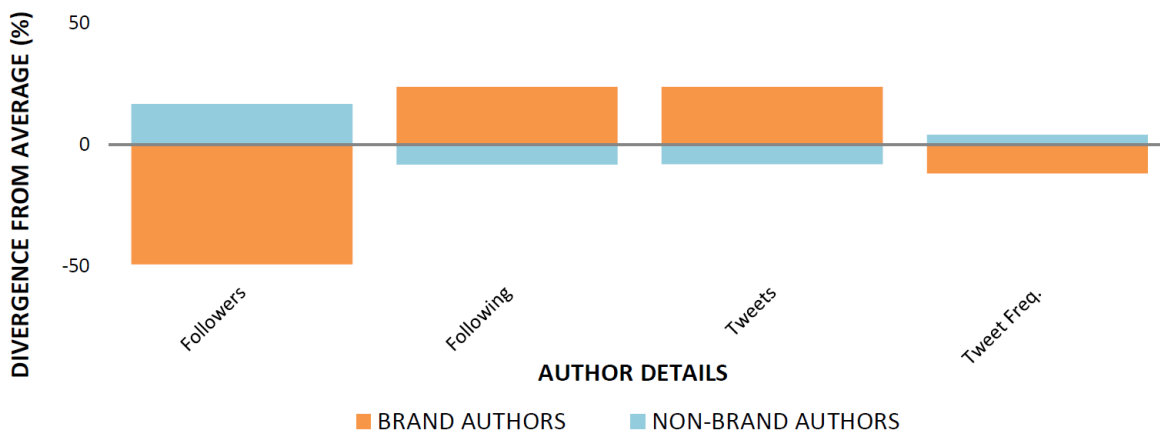


Figure 7: Brand author and non-brand author tweet types



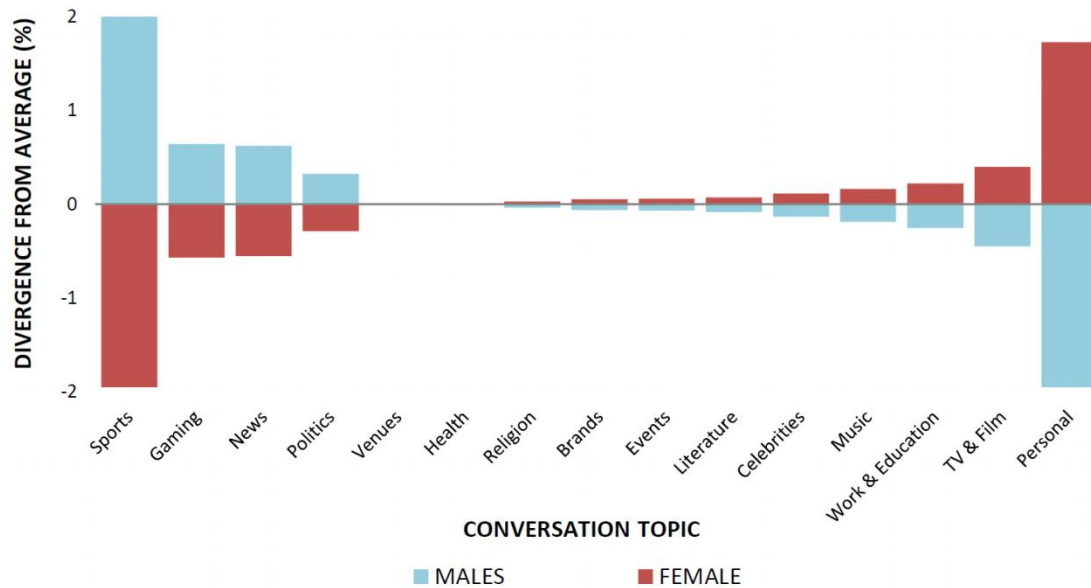
Brand mentions were more likely to be retweets than replies, suggesting that users were more inclined to publicise brands passively rather than creating original content. However, the above average level of web links and tags did indicate that authors were bringing brands to the attention of other, specific users and that this process was well-integrated with online content elsewhere (via inclusion of URLs).

Figure 8: Brand author and non-brand author variables



4.2 Author gender

Figure 9: Conversation topics of male and female authors



The chart above highlights gender differences in topic popularity. **Sport** and **'personal'** tweets witnessed the greatest divergence between genders. Though a less pronounced difference, brand mentions were more common among females than among males.

Male-orientated conversation topics included sport, gaming, news and politics. The above average news content accounted in part for the tendency for male authors to include web links in their tweets.

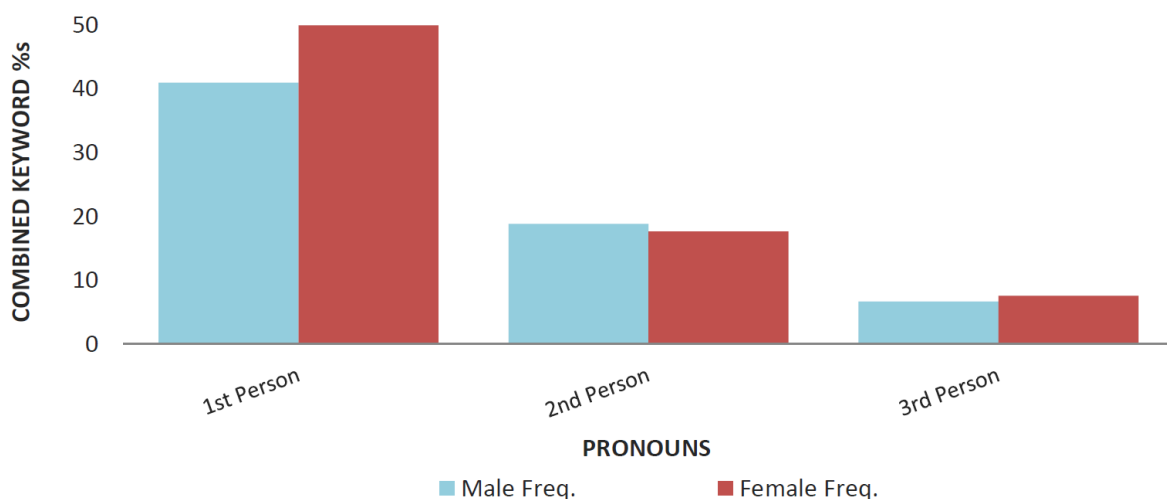
By contrast, female authors more frequently discussed television, work, education, music, celebrities and literature. Female tweeters were also more likely to tweet 'personal' content. This difference was significant ($p < 0.05$) and, comprising a sizeable portion of the corpus, warranted further analysis.

Figure 10 shows **pronoun frequencies** within the tweets of male and female authors. Second and third person pronouns contributed almost equally to gender-specific corpora. However, first person pronouns were more prominent within the tweets of female authors.

This finding, alongside other female-skewed features, indicates that **gender plays a significant role** in social media usage. Past research has noted female and male-skewed discourse characteristics, some of which were also apparent in the data here¹⁰. Specifically, female authors more frequently used emphatic and emotive terms than their male counterparts. This indicates that tweets replicate gender features previously associated with the spoken mode¹¹.

Female authors more frequently included emphatic and emotive terms than their male counterparts, echoing past research into the role of gender in language use. In addition, the prominence of first person pronouns may suggest a more ‘self-orientated’ stance¹². **Female authors tended to be more explicitly invested** in Twitter while male authors were, on average, comparatively detached in tone.

Figure 10: Pronoun frequencies in male and female author tweets



¹⁰ See Lakoff: 1975; Tannen: 1994; Cheshire:2002; Thelwall et al.: 2009; Danescu et al.: 2011.

¹¹ Twitter allows for text exchanges that have both immediacy and social purpose, leading to features expected of the spoken mode. For more information, see Androutsopoulos:2011:1. For restrictions, see Danescu et al.:2011.

¹² Pennebaker: 2011

However, there are two stark differences between Twitter and other forms of communication. Firstly, tweets are much more restricted in length than SMS, email, forums or other networks. This brevity leads to more succinct texts and encourages a **sense of immediacy**¹³.

Secondly, communication is virtual rather than a direct, in-person exchange. Past research has suggested that features associated with female speakers (including more elaborate politeness strategies) are less pronounced online, leading to a breakdown of traditional gender roles¹⁴. However, the findings of the current study show male and female-generated texts are often distinct in both **structure** and **content**.

'Good to see you today mate got two weeks off we'll go for a catch up in them two weeks'

'I love your Tweets so you are my favourite and one FF for this week. Let's see if we can meet up for a coffee during the conference'

The two example tweets above were selected as they served similar purposes. They both featured within Twitter conversation chains, both comprised an offer of positive face (flattery) followed by the suggestion of a meeting in person. The first example was written by a male author, the second by a female author.

¹³ Milstein et al.: 2008.

¹⁴ Michaelson, Pohl: 2001.

Only the inclusive subject 'we' appears in the first example: the tweet otherwise omits first person pronouns entirely (hence 'got two weeks off' rather than 'I will have two weeks off'). By contrast, the second tweet includes both first person subject (singular and inclusive) and possessive pronoun 'my'. The examples also contain gender-skewed terms. Female authors used the word 'love' more than twice as frequently, but 'mate' only 56% as often, as their male counterparts.

The male author of the first example also presupposed authority. This led to statement 'we'll go for a catch up' which lacks the hedging features of the female author's 'Let's see if we can meet up'. There are, of course, exceptions to these trends. However, the data pointed to significant differences between the texts of male and female Twitter users.

These differences were not only visible within 'personal' tweets, but extended to brand mentions. There were 25 first person pronouns for every 100 female tweeter brand mentions and only 15 for every 100 male branded tweets. Overall, first person register was much rarer in brand mentions than in general chat.

These findings support previous studies of gender in electronic discourse¹⁵ and hold several implications for those involved with social media. Lexical and grammatical features can be used to predict author gender. Likewise, brand voice can be purposefully crafted to replicate male or female-skewed patterns.

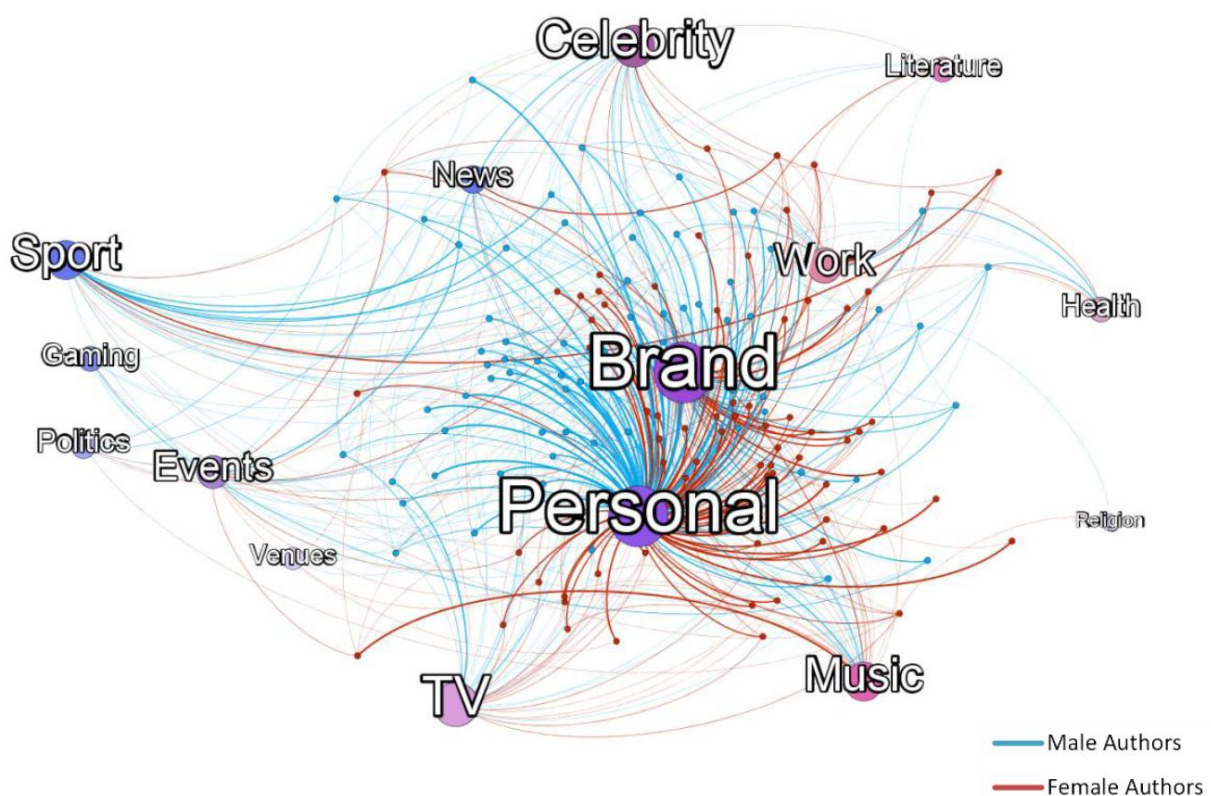
First person register was associated with the richest sources of consumer voice. These were the public comments typically considered most 'valuable' for the purpose of understanding consumer behaviours.

¹⁵ Thomson, Murachver, 2010.

'I love the way my hand thinks I have disposable income and accidentally orders a new dress and jacket from River Island today... #oops'

The data revealed a divide between two major types of Twitter behaviour. The first author type was more likely to be male than female and was characterised by a lack of personal pronouns. The second, rarer type of author was more likely to be female and discussed brands and products in relation to their own, offline experiences.

Figure 11: Topic network cloud¹⁶



¹⁶ Network image created using Gephi visualisation software- Bastian et al.: 2009).

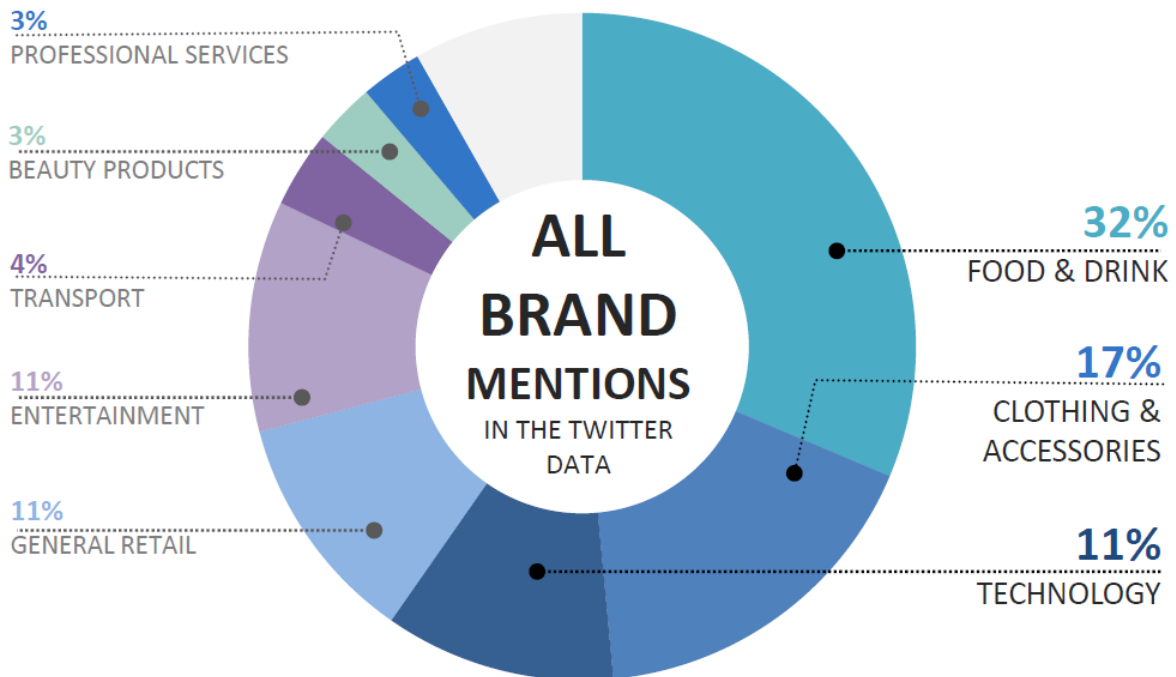
The network shown in figure 11 represents authors of brand mentions. Brand authors were often tweeters of 'personal' texts, as well as tweets relating to work or education. The network also shows a tendency for male brand authors to also mention sport, gaming and news. Female tweeters, by comparison, were more frequently drawn to music, work and personal tweets.

The findings suggest varying contexts for brand interactions. Broadcasting was more likely to resonate with male Twitter users, while female authors preferred to actively engage with brands by relating them to their own daily lives.

Sport and news were broadcasting topics: audiences were exposed to content and then publicised this online. Personal, health and music topics were more likely to be mentioned by female authors in first person narrative.

4.3 Brand types

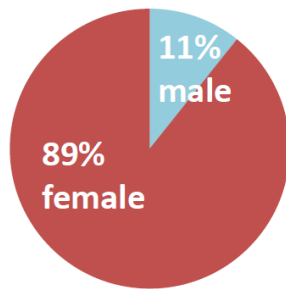
Figure 12: brand types mentioned on Twitter



The chart above shows the breakdown of different brand types within the corpus. Food and drink products and services, clothing and technology were the most prominent industries. These top three industry groups were analysed in greater detail, contributing a combined total of 60% of brand mentions.

Brands ranged from large, established names including Amazon and Ford to smaller companies such as Azendi and Micro Scooters. Equal numbers of products and services were mentioned, suggesting an even split between secondary and tertiary sectors.

Case study: Clothing and accessories



KEY BRANDS

- River Island
- UGG
- Boohoo
- Zatchels



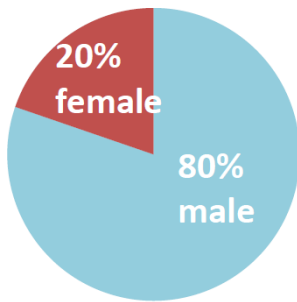
Clothing and accessory brands were much more **female-orientated** than those of other industries. Fashion brands were often mentioned in the context of **Twitter competitions** (accounting for the prominence of 'RT', 'enter' and 'win' in the topic cloud above).

'RT & Follow @Zatchels to win an exclusive limited edition Where's Wally? Zatchel...'

Consumer voice indicated tensions between intent to purchase and deterrents. In these cases, authors purchased products *despite* a range of factors. Deterrent factors included brand **reputation**: 'Not bad for Primark', shopping **environment**: 'It's like hell in [Hollister] but I coped!' and, more emphatically, **expense**: '[The River Island sale] is happening again!!! OH MY!!!!!!!!!!!!!! I must resist this time..... WAHHHH'¹⁷. The finding suggested that brand presence is dependent on author's **face**¹⁸ (see 5.1).

¹⁷ This concept is explain in further detail in section 5.1.

Case study: Technology



KEY BRANDS

- Apple
- Samsung
- Microsoft
- Orange



Compared with other major brand types, technology was a male-orientated category. Technology prominence in the corpus was largely due to the release of the **iPhone 5**, which triggered online buzz in the run up to the UK release on September 21st.

'Apple sold more iPhones in three days than human beings are born in the US in a year'

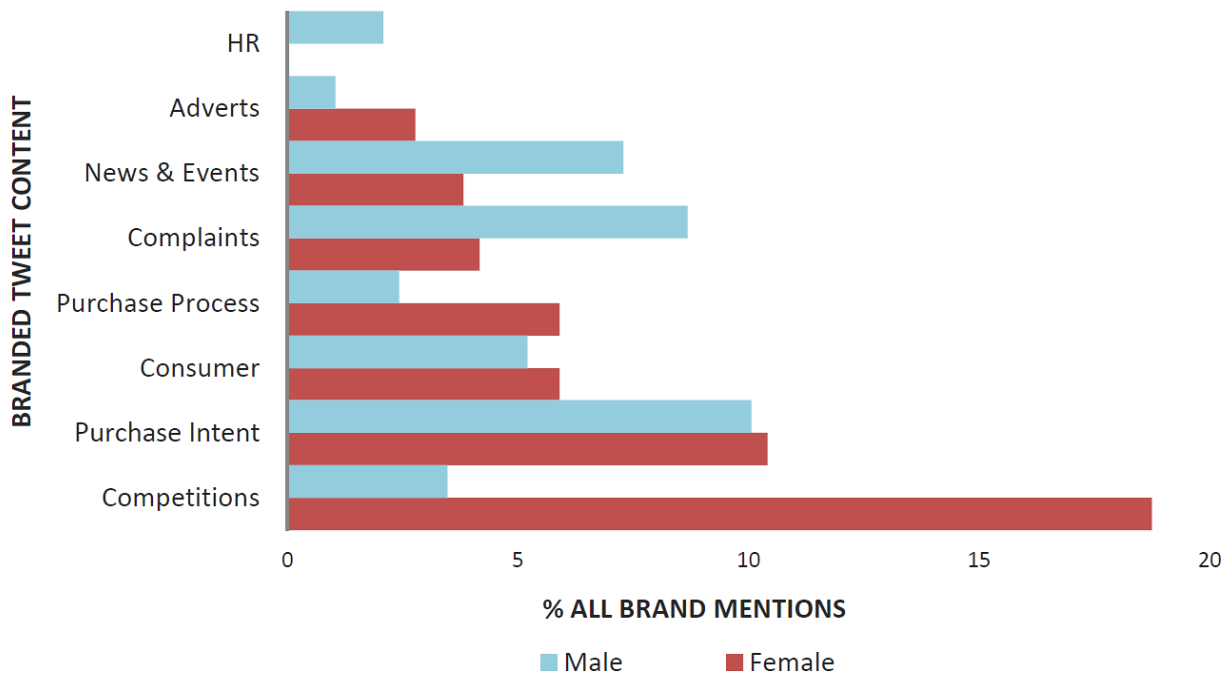
Because of this, branded technology tweets contained **above average adjective frequencies**. New model reactions varied from 'impressive' and 'AMAZING!' to 'disappointing' and 'faulty'. However, these features were equally present in non-Apple mentions, meaning that they more likely to be **representative of the industry** more broadly.

Brand comparisons were also frequent. Whereas fashion tweeters were brand-loyal, technology consumers actively compared the products of competing brands and the prices of competing retailers, before discussing this information online.

¹⁸ Brown, Levinson: 1987

4.4 Branded tweet contexts

Figure 13: Conversation purpose in male and female brand tweets



All branded mentions were manually categorised according to their purpose or focus, ranging from competitions to product complaints. Purposes varied in accordance with author gender.

The starkest divergence was in Twitter competitions. Female authors were much more likely to take part in **competitions** than their male counterparts. Each competition offered a free giveaway incentive in a bid to gain exposure and followers:

'RT & follow by 5pm today for a chance to win a 250g jar of Marmite Gold in our #MondayMadness competition'

Many authors who took part did so from 'hollow' accounts: these were used to enter large volumes of daily competitions but served no communicative purpose.

The second most frequent type of tweet involved users expressing their desire for a brand's products or services. These authors often expressed intent to purchase.

'I need sugar. I need sugar. Mmmm, how did that Mars Ice Cream get there?'

These were similar to 'consumer' tweets, a more general category assigned to tweets which presupposed purchase. Both consumer and potential consumer voices were roughly equal for male and female authors. There was a noticeable split, however, between the number of male and female descriptions of **the purchase process**.

'Why is the girl serving at McDonald's trying to make a conversation over my nail varnish: /'

'First one in Nando's as it's opened... say no more '

Female authors were much more likely to tweet about brands as they experienced them. This was especially true within restaurants, where users accessed the network using their smartphones.

Mobile Twitter access is itself more prominent in the UK than overseas. According to Twitter, 80% of UK users logged into the micro-blogging site using their mobiles over a one month period in 2012. This was much higher than the global average of 55%¹⁹. The finding suggests that, as is often the case linguistically²⁰, females may also be more **innovative** in their use of social networks. Similarly, as mobile access increased in all continents between 2010 and 2012²¹, the UK may be viewed as indicative of future usage overseas.

¹⁹ Arthur: 2012. Note that alone, this statistic also reflects lower rates of access to technology more broadly, rather than preference for mobile over static internet access. For more information, see Morales: 2013.

²⁰ Labov: 1990; James: 1996.

²¹ Pingdom: 2012.

Male authors made **more complaints** than females in the data. These complaints included underwhelmed responses to Apple's new iPhone 5 (technology itself being a male-dominated branch of the data). However, male author tweets showed discontent at a range of other brands:

'I f'in hate Easyjet. Every single one of the 4 flights I've taken has been late and getting home 2am as a result.'

'Yodel is a headache mate, I already made 2 complaints against them in 3 months.'

This finding challenges two common assumptions. In the first instance it shows that the consumer groups most likely to spread negative online publicity are not necessarily those most 'connected' to a brand. Female authors were more likely to mention brands than males and also more likely to give immediate personal impressions. However, it was the male authors who contributed more negative responses. Consumer groups that appear less immediately active may warrant analysis as possible sources of more long term negativity.

Secondly, complaints accounted for less than 13% of brand mentions on Twitter. Social media has proven itself an increasingly popular means for resolving consumer complaints²². Brand mentions were not, however, restricted to customer service opportunities. The corpus showed purchase intent to be a more common motive for mentioning a brand on Twitter.

²² Brandwatch: 2012a; Horovitch: 2012.

Twitter Competitions

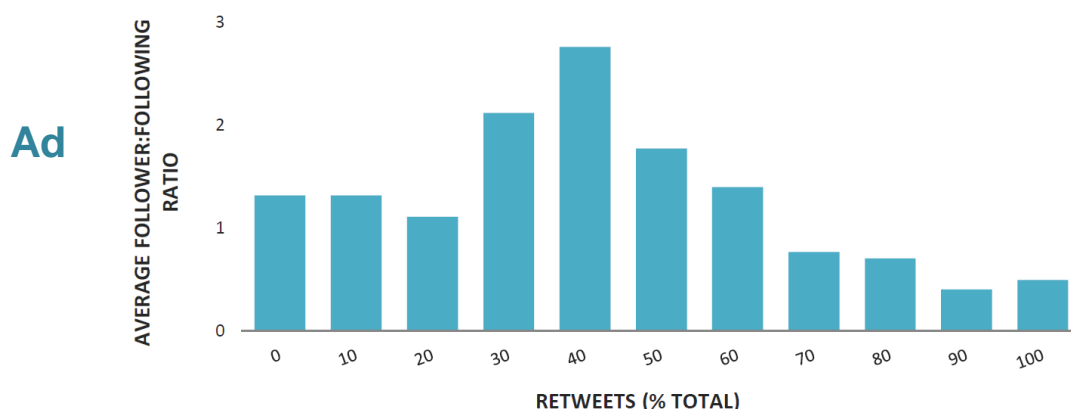
Online competitions were used to provoke consumer engagement. As a result, competition mentions were almost exclusively retweets and echoes of corporate activity. To counter this, some brands offered automated tweets in first person in a bid to replicate consumer voice:

'I just entered the @Reiss sweepstake to win an accessory!'

However, this strategy did not tackle the problem of **limited reach**. As shown in figure 14, authors who mainly retweeted had the lowest average number of followers for every person they in turn followed. This ratio, a loose indication of influence, was greatest for those who retweeted 30-40% of the time. By comparison, those who entered many competitions were not influential on Twitter²³.

In addition, **automated texts** may prove detrimental to brand identity. If users expect Twitter to be a platform for useful, engaging content, the overt marketing of hollow retweets could develop 'spam' status. This corresponds with a broader trend towards preferred personalised content. Faced with increasingly automated marketing, users are placing ever greater value on **human voice** online²⁴.

Figure 14: Author influence and retweet frequency²⁵



responses

²³ Though these users had lower follower to following ratios, these differences fell within the Twitter cap system (maximum following of 2,000 is permitted before the ratio cap is enforced) and so were not restricted.

²⁴ Smith, Zook: 2011: 36.

²⁵ Accounts with F: F ratios greater than 100 were discounted from the graph to prevent 'celebrity' skew.

Explicit TV references were more prominent in non-branded than in branded mentions (see glossary for definitions). Despite this, the overlap category of **televised adverts** did offer a rich source of viewer feedback. Female authors were more likely to mention TV in general and, as in other topics, more frequently offered their immediate impressions via Twitter. Upbeat comments showed both commercial awareness and naivety:

'That Twix advert really makes me want a Twix, must say excellent advertising'

'The new @marksandspencer advert is really good, I can imagine sales increasing.'

As well as TV, other ad media appeared in the data. In the first example below, one author bemoaned McDonald's Olympic poster slogans. In both examples, the texts appear designed for the attention of the brands in question:

'Have the Olympics finished yet? If they have, can McDonalds please take down those piss-weak [...] posters at Euston?'

'Rachel's Organic Yoghurt advertisers take note: having a woman with a sultry voice saying "slips" over and over will not make yoghurt sexy.'

While the first tweet took the form of a third person request, the second example

targeted the brand explicitly with 'Rachel's Organic Yoghurt advertisers take note'.

This type of tweet is not uncommon in brand mentions. Authors may grammatically address their tweets to the brand, but the **primary audience** may still be their followers more broadly. As brands increase their Twitter presences, so this might be expected to shift towards a primarily **consumer-brand** interaction.

5. Implications

5.1 Concepts of face

The mass of data collected raised questions of **tweeter motive**. The driving forces behind consumer endorsement, reputation and brand loyalty warrant further explanation. Consumer voice, especially in relation to retail brands²⁶, exhibited signs of mixed sentiment. In these comments authors appeared to criticise their own actions. The following music-related example from the corpus demonstrates this principle:

'Listening to Westlife I am cool'

Here, the likely implication is that the author does not consider Westlife cool. Why then publicly broadcast the message? There are many possible reasons. It could be that the author suspects Westlife is a 'guilty pleasure' they share with their followers (hence creating content to which their readers can relate). Alternatively, the tweet may have value as a novel or comical message.

The author is (presumably) willingly listening to the band and voluntarily publicising this action. It could be that they do not consider the band 'uncool' at all but realise that this could be the view of most of their followers. For this reason the 'I am cool' could be an insurance policy against reputation damage (by acknowledging the stance of the readers). The same analysis can help unravel such tweets as 'Feeling guilty taking your M&S bag for life into Tesco', where guilt (in the literal sense) is contradicted by the act of tweeting. Explanations have one common characteristic: the author is anticipating the reaction of their audience.

²⁶ See section 4.3: Clothing and accessories.

Modern 'Face' theory is grounded in sociolinguistics and here offers a useful framework for **understanding brand-consumer online relationships**. While such frameworks were built to explain face-to-face politeness strategies²⁷, the findings here have reflected other patterns of spoken word²⁸. As only public tweets were analysed, authors can be said to have an online 'image', or sense of self, which they form through their interactions with other users. In addition, other online interactions have been analysed using face theory, including dispute resolution²⁹.

In politeness theory, each individual may be said to have both positive and negative face:

- **Positive face** equates to *self-image*. Individuals want others to acknowledge their self-image and approve.
- **Negative face** equates to *sense of freedom*. Individuals want to act freely, without imposition or distraction from others.

These principles can explain many aspects of consumer-brand interactions. For example, the most commonly cited reasons why Twitter users unfollow accounts are 'too many promotional tweets' and 'too much spam'³⁰. These behaviours are negative **face threatening acts** (FTAs). Twitter users become irked by the distraction of spam and would rather avoid the imposition of irrelevant sales material. The result is that brands creating too much noise on Twitter risk alienating their followers.

²⁷ Goffman: 1967; Brown, Levinson: 1987.

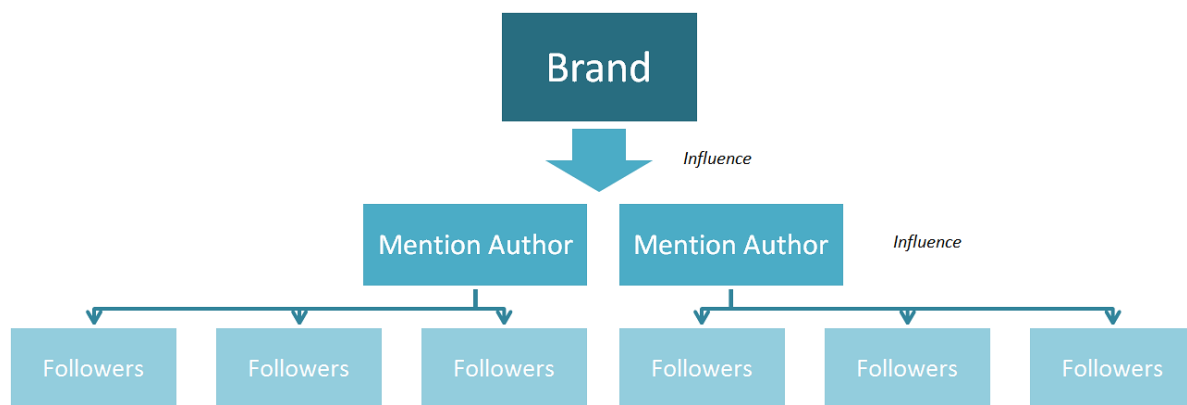
²⁸ See footnote 11.

²⁹ Brett et al.: 2007.

³⁰ Chef: 2011; Brown: 2013.

Face theory also offers an alternative perspective on **what drives authors to tweet about brands**. Influence is often considered a causal chain reaching from brands to the social web.

Brands create impressions, both offline and online, which manifest in online mentions. These mentions are then exposed to the author followers. Brands may target ‘influential’ authors to broaden exposure, or encourage retweets (via competitions, for example) to increase exposure vertically. This model can be represented by the following structure:



However, face theory suggests a less linear influence process. Brand reputation can be said to influence consumer behaviour because of face, or ‘social self-worth’³¹. In this way, the perceived quality, pricing and target audiences of brand products become merged with the positive face of each consumer. When an author tweets a brand name, they are aligning their reputation (positive face) with that of the brand. This move is a risk: if the brand is negatively viewed by their followers, then this may also reflect badly on the author.

To avoid this, tweeters may predict the likely attitudes of their followers to the brand in question. In some cases they may use self-detriment as a buffer against positive FTAs:

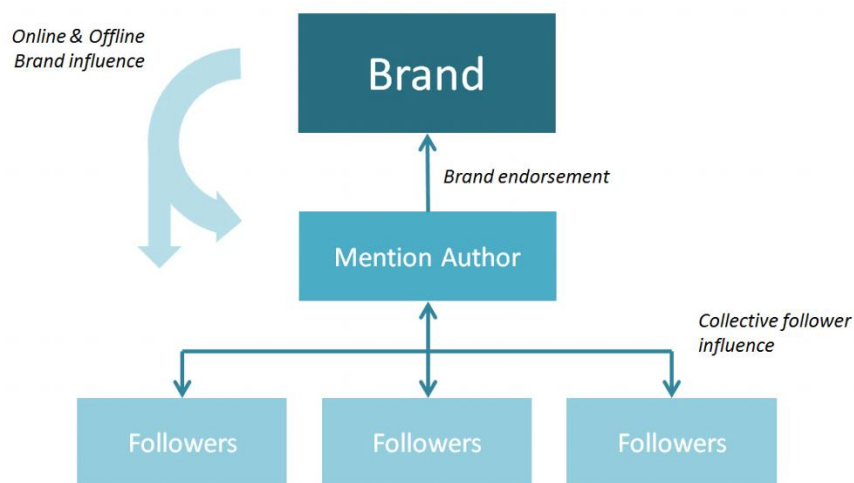
‘Is it sad that I want #MW3 for Christmas? #loser’

³¹ Past findings have shown face awareness to be positively correlated with ‘material values’ and ‘brand consciousness’. See Liao, Wang: 2009.

In other cases users anticipated negative responses and added clarification to avoid FTAs:

'I want a Louis Vuitton bag, a nice one not a tacky one.'

Inversely, making a negative comment about a brand with a poor reputation may boost an author's positive face. For brands, this concept highlights the **importance of social media strategy**. Rather than reputation comprising the views of each individual user, it can be seen in the dynamics between any two or more accounts. The likelihood of an author endorsing a brand depends on how well they predict this message will be received by their followers. The result is a momentum effect: if unchecked, negativity can quickly escalate within social networks. This cyclic model of influence can be represented as follows:



Authors and followers

share reciprocal relationships. Face-aware Twitter users are *influenced by* their followers. These relationships feed into brand reputation via social media, with influence from brand to consumer taking place both in and outside of digital channels. For this reason brands should consolidate aspects of their online and offline strategies, in order to maximise the value of their voice on the social web.

5.2 Conclusions

The most salient theme of the findings was, arguably, the **immediacy** of tweets in the corpus. Twitter users tended to describe their responses to activities and surroundings as they experienced them.

This real-time trend was much more pronounced for **female tweeters**. By contrast, males often adopted a longer-term perspective in their content. This manifested itself in the language used by authors online. Gerunds, for example, were common within television and retail conversation. Female authors used first person pronouns much more frequently than males, suggesting a greater level of **personal engagement**.

Brand names appeared in **3%** of male tweets and **4%** of female tweets³². Male authors were more likely to discuss tech brands, sport and news, while retail, television and the workplace were female-orientated topics.

Branded tweets were significantly more likely to include **tags**, but significantly less likely to be **replies**, than non-branded tweets. The finding suggested **potential for greater engagement**: brands were being promoted by the public on Twitter, but were rarely actively discussed between two or more authors.

Online Communities

Analysis uncovered a natural divide between the average behaviours of male and female Twitter users. However, this variable exemplified the first step in establishing the typical behaviours of any **online community**. Before initiating online strategies, brands must first identify the characteristics of their current and potential audiences.

It could be, as was the case for many of the female author group, that a given audience is highly **mobile** and tweets in real-time referring to their **immediate surroundings**. This type of consumer may be more visibly receptive to **offline**

³² Once the data had been weighted to account for frequency variation.

publicity sources as they are more likely to describe their offline surroundings on social media (hence providing explicit connections between offline and online reputation).

By comparison, less immediate posters may require different incentives. In the random sample of the current study, male authors mentioned brands **less frequently** than females (fig. 9). However, they were **more likely to reply** to one another in conversation strings. This type of tweeter was less responsive to engagement campaigns and more **receptive to newsfeeds**. This suggests that broadcasting could prove a more effective strategy supplement in these cases. For brands, the male-skewed preference for online topics means that content can be more carefully tailored to consumers. Gender ratios may influence whether brand followers respond more to web-centric content (including viral shares, online articles or page links) or sharing offline experiences and uploaded photos.

Though prone to **less emotive** language, male authors were more likely to make complaints in brand-specific tweets (Fig. 13). This reflected in part the preference for tech brands³³, but does highlight that the most prominent author groups (in this case female Tweeters) are not necessarily the most susceptible to negativity.

Complaints only contributed a minor proportion of brand mentions in the data. Consumers were more likely to express their **purchase intent** than they were to complain about a brand. However, the corpus was concerned with consumer comments *about* brands rather than interactions *with* companies. Complaints are

³³ Tech mentions were more prone to brand comparisons and complaints, whereas retail tweets reflected greater brand loyalty. See section 4.3.

more common among consumer-brand exchanges, with customer service accounts set up to deal with complaints online³⁴.

Twitter competitions were used by companies to grow followings and exposure. However, these largely resonated among accounts used solely for competition entry ('hollow' accounts). Accounts that did not produce any original content had very low follower: following ratios. Those with the highest ratios only retweeted between 30 and 40% of the time.

The type of Twitter users most likely to mention brands were not those also discussing TV. **Television** did feature heavily in the data, but the overlap between TV and brands (televised advertisements) was lower than for other topics³⁵. **Music** and **sports** fans were also less likely to mention brands.

The conversation topics most associated with brands were **work and education** (comprising personal experiences and daily routines). This was despite the fact that the brands mentioned had no explicit link with the work or school environments³⁶. One explanation is that work/edu. tweeters were those concerned with their day to day surroundings. It was via these contexts that brands were mentioned on Twitter, either via **offline** advertising or else first person **product use**. These authors preferred to tweet about offline activities. Because these foreseeably created **lifestyle impressions**, authors were typically drawn to brands they believed *their followers* would consider prestigious³⁷: these were **aspirational** brands.

5.3 Restrictions

³⁴ Further details can be found in the 2012 Customer Service Index, see Brandwatch: 2012a.

³⁵ See figure 6. However, separating film and general TV comments from live viewing could reveal a stronger brand link (including immediate reactions to TV advertisements).

³⁶ There was no indication of any intrinsic link between the brand products/services and education or the workplace.

³⁷ See section 5.1: Concepts of Face.

It is estimated that there are now more than 10 million active Twitter users in the UK. This figure includes corporate, charity, group and event-based accounts (which were excluded from the study). Working with such a large network means that replicating the study would strengthen the claims suggested by the corpus. Despite this, the data did reveal some statistically significant findings; both differences between author groups and correlations between Twitter topics (fig. 4).

If extended to international markets, the findings should be generalised with caution. Beyond culture-specific variables, Twitter behaviour is atypical in the UK. 80% of UK tweeters, for example, use mobile access and the growth of these technologies differs significantly between countries³⁸.

Random accounts were selected using random word generators (excluding those explicitly linked to any of the pre-defined topics)³⁹ which were used to create queries limited to UK Twitter accounts. Mentions were then categorised for gender based on profile photo or bio. details. Manual analysis ensured optimal accuracy within the constraints of the study.

Ten randomly selected but consecutive tweets were analysed by human data validators for each account. However, the corpus (covering August-September 2012) was time-restricted. Because of this, specific television and sporting events may have skewed the data⁴⁰. Due to the below average association between brands and these topics, the outcome could be that the 3.6% brand frequency figure is slightly underestimated.

³⁸ Arthur: 2012; Morales: 2013.

³⁹ See methodology.

⁴⁰ However, sporting and television events feature continually in social media, often in cyclic rotations. Low intra-account variation also indicated that the results could be extended beyond the period analysed.

5.4 Further Research

Further research could adopt one of two designs. The first, a synchronic design, would extend the study to other social media platforms and gauge the variations between channels.

Data could also be collected internationally to measure cultural contrasts. If the behaviours of a market's Twitter users are already known (e.g.: the percentage of smartphone access) then this could be correlated with text features. The resultant findings could be used to predict future trends in online communication.

Alternatively, the study warrants extending via a diachronic design. Reviewing the data collected over a wider time frame would hold a considerable advantage: it would allow a longitudinal data range, in which online trends and behaviours could be monitored over time.

In either scenario, future research could hold valuable insights. Findings of the current study have challenged assumptions⁴¹ of online consumer behaviours. By establishing the nature of Twitter audiences, brands can target their efforts more effectively to engage or inform, online or offline, via niche or multifaceted approaches.

⁴¹ See section 5.2: Online Communities.

Glossary

Brand

'Brands' referenced in the study are commercial product or service labels. These include broadcasting companies. Brands are not limited to public or private sectors. 'Online brands' are those that are internet-centric and this is context dependent. Brands with balanced online-offline focus were not classified. In retail, online-exclusives (ASOS, for example) were considered 'online' brands, whereas brands with high-street presence were generally considered 'offline' (even though they also offered online services).

CMC

Computer-mediated communication, within the context of this study, refers to the sub branch of linguistics concerned with digital media exchanges. This is the study of how users communicate via digital technologies, and how platforms may shape the way people interact.

Face

Face, as a sociological or sociolinguist term, refers to sense of self in social contexts. Face theory is concerned with reputation, influence and politeness strategies. In this study, face is used to describe the link between online consumers and aspirational brands.

FTA

Face-threatening acts are acts which may damage the positive or negative face of an individual. In this study, every tweet may be seen as a potential FTA. If a tweet is irrelevant or demands something from the reader then it can threaten the reader's negative face. If a tweet endorses an unpopular brand, it may damage the positive face of the author.

Hashtag

The prefix '#' is used on Twitter as a metadata tag. It is attached to keywords and these keywords can be monitored to track prominent or 'trending' topics. However, not all Twitter users use hashtags and those that do may not use the same tags on the same occasions. This study does not rely on hashtag usage for data analysis.

Mention

Any text or exchange can be called a mention. In the current study each tweet is considered a mention. Brand mentions are texts that include specific brand names.

Purchase Intent

Tweets are classified as having purchase intent if the author expresses, either explicitly or implicitly, that they will purchase or want to purchase (without any countering deterrent) a product or service.

Query

A query is a search string used to collect mentions. Twitter queries were used here to generate corpora of random accounts.

Reply

A Twitter mention is considered to be a reply if it is responding to a previous tweet. These create mention chains in which users directly interact.

RT

RTs, or retweets, are mentions whereby a user re-posts a tweet previously posted by another author. In these cases the author is publicising another user's content rather than generating new text.

Solo

In this study, a 'solo' tweet is any Twitter mention that is not a retweet or a reply and does not tag another account. These tweets are essentially isolated. Though other users may RT or reply to them, the mention itself contains no explicit link to another user.

Tag

A tweet categorised as a 'tag' is one which includes the ID of another account. The tagged account will then be notified. Tags may be used to grab the attention of specific accounts, initiate conversation or mark users at specific locations or events.

Tweetup

A 'tweetup' is a real-life meeting organised by groups of Twitter users.

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