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Players were early adopters of Twitter

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The value of Twitter for sports fans

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Abstract

Twitter has become a favourite social media vehicle for sports organizations looking to connect with fans. Less is known, however, about the value of tweets for the fans themselves. This research is a preliminary investigation into assessing this value by attempting to classify sports tweets from the fan perspective, and determining whether there is a relationship between value and team identification (TI). Results revealed that TI significantly influences how much people value specific categories of sports tweets. Future avenues for research are suggested.

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Introduction

Sports organizations have grasped the importance of using social media technologies to connect with their fans. They have provided news feeds, blogs, interactive web sites, and discussion boards and established presences on Facebook. Twitter, a micro-blogging social network, has also been heavily used by sports organizations to increase their connection to fans. Some of the early adopters in sports were the players themselves, who often provided an insider perspective on games. For example, Shaquille O’Neal (@THE_REAL_SHAQ) successfully interacted with more than 30,000 fans within just a few months of launching his account in 2008.¹ As sports organizations themselves started to use Twitter, they found an avenue for game promotion and fan involvement before, during and after sporting events. For example, the New England Patriots often post tweets to increase excitement about upcoming games, provide play-by-play commentary during the game, and then follow up with game recaps and player interviews. They also share fan pictures and posts. By using Twitter to connect sports fans with the teams they follow, organizations can foster more involvement — not just with the teams themselves and sports personalities, but also with other fans.² Twitter gives fans something that other media cannot provide as easily — access to instantaneous information from both official and unofficial sources. Both the accelerated delivery of information on mobile platforms via the internet and the ability to interact with that information is changing how fans consume content. This consumption is more personal than the mass media broadcast model so long favoured by sports organizations.³

Twitter content may increase team identification (TI)

Although research has been conducted on the value of Twitter for sports organizations, less is known about the value for fans. For example, the New England Patriots tweet not only about current games and player commentary, but also about charitable events attended by team members, past and present game statistics, local promotions and contests, and retweets, photos and other information supplied by fans. But is that content valuable to their followers? The purpose of this research is to take an initial step in assessing the value of tweets to fans as it relates to TI. To investigate, tweets generated by a National Basketball Association (NBA) team were classified into subject categories relevant to fans. A survey was then conducted to assess the use of Twitter to follow a team, and relationships between TI, use of Twitter and different categories of tweets.

In the following section, a short overview of Twitter is provided along with a discussion of its use in the sports industry. The value of content as it affects relationships that sports marketers develop with consumers and with TI is also considered. Subsequent sections present the methodology and results for categorizing sports tweets, survey findings, a discussion of implications for social media administrators in sports organizations and suggestions for future research in this area.

Overview of Twitter

Literature review

Created in 2006, Twitter is a social network and micro-blogging tool that is part of a group of technologies generally classified as ‘social media’. These tools tend to possess the characteristics of what Tim O’Reilly⁴ termed ‘Web 2.0’: tools delivered over the internet (more specifically via the web), providing rich, interactive content and harnessing the collective intelligence of the online community. Twitter users send ‘tweets’ — messages of 140 characters or less — on the Twitter website (<http://www.twitter.com>) via smartphone apps, third-party apps or sites using Twitter’s set of application programming interfaces. Messages are public by default and are presented in reverse chronological order. Users may ‘follow’ (subscribe to) tweets from other users and, in turn, they may be ‘followed’. Usually this is an asymmetrical relationship, as there are more followers than those being followed.⁵ Over the years, various conventions have been used to maximize the utility of the 140-character limitation, such as URL shortening services (eg bit.ly), the @ sign for mentions and hashtags (#) for categorizing content. Twitter expanded its syntax with retweets (RTs) for sharing a tweet from other users to a user’s own followers, and direct messages, a private message to a follower. Twitter has also provided tools for developers to embed multimedia content into tweets.⁶

Promoted tweets

Twitter’s value to organizations, including sports teams, has been furthered through its advertising vehicles: promoted tweets, promoted trends and promoted accounts. Promoted tweets are tweets that advertisers purchase to expand their marketing reach. They can appear on a search result page, user timelines, enhanced profile pages or through official Twitter clients and third-party clients (eg Hootsuite). End users may see

promoted tweets on their timelines depending on what they follow and other behaviour (eg retweeting) (<https://support.twitter.com/articles/142101-promoted-tweets#>).

Promoted trends

Promoted trends allow users to see context-based, time- and event-sensitive information from Twitter's advertising partners. As with Twitter's Trending Topics feature, tweets with the same topic using the trending hashtag appear in the results, with the promoted trend as the first tweet (<https://support.twitter.com/articles/282142#>).

Promoted accounts

Promoted accounts display a 'who to follow' section in the search results to encourage more followers who may have an interest in the product, service or event. All of these advertising vehicles can be geo-targeted as well (<https://business.twitter.com/en/advertise/promoted-accounts/>). For example, Columbia Sportswear could be seen as a promoted account in the 'who to follow' section based on the other organizations (sports, outdoor equipment suppliers) a user follows. Twitter also supplies its own analytics tools to monitor promoted tweets, trends and accounts, a followers' dashboard to analyse demographics and behaviour, and a website dashboard to measure traffic generated from Twitter to an organization's site. Annual revenue for Twitter in 2012 was estimated at US\$317 m, with over 200 m monthly active users.⁷

Twitter appeals to younger, more urban users

Twitter demographics tend towards younger, urban users — the Millennial generation. According to Pew Research in 2012, quoted in Bullas,⁸ about 15 per cent of online adult users used Twitter; in addition, 26 per cent of internet users between the ages of 18 and 29 years used Twitter, and 28 per cent of online African Americans. The report also noted a correlation in the 18–24 age group between Twitter usage and smartphone adoption, and a similar correlation with African-American and Latino users. An earlier report⁹ noted that 5 per cent of Twitter users account for more than 75 per cent of the activity and that over half of all updates are posted using tools other than Twitter.com, such as TweetDeck.

Marketers follow more than other users

As before, most users seem to be concentrated in highly urban areas (eg New York, Los Angeles, Boston), with a fairly even split between men and women. The report also noted that 15 per cent of users who are marketers follow more than 2,000 users as opposed to 0.29 per cent of overall Twitter users. A Huffington Post study¹⁰ of college students using Twitter found that more than half follow companies they like and about the same percentage follow celebrities. Interestingly, college students were more likely to use laptops or desktop computers than smartphones when accessing Twitter.

Uses of Twitter in sports

Sports organizations capitalize on Twitter to increase fan engagement

As social media has become more established as a means of interaction, researchers have begun to examine the role of tools such as Twitter from the perspective of the sports organizations themselves, as well as athletes and consumers. For sports organizations, Twitter is a way to promote the team, increase fan engagement, build relationships and drive revenue (eg game attendance, merchandise). In a series of interviews conducted

with executives from several Australian professional sports clubs, managers noted that their organizations used social media to add value to their brand and to strengthen the bonds fans have with teams, including giving those fans access to ‘insider’ information.¹¹ Some executives also stated that a key challenge in using social media was to increase the value of the content to followers through personalization and targeting.

Short lifespan of information on Twitter

In a study of bicycle race organizers, Twitter was used to spread information about races and to offer promotions. Organizers found that most of the followers were attracted during the first few days of establishing the feed. Followers with large social networks of their own helped to spread information about the event.¹² One interesting characteristic of Twitter noted in this study was the short lifespan of information on Twitter, and that the network of followers for events grew quickly at the beginning and then tapered off. For less one-off, event-based streams, such as National Football League team coverage, that effect might be more moderate, with followers continuing into the off-season even as the number of tweets declines.

Athletes have adopted Twitter

Twitter has been identified by athletes as the premier online social networking tool.¹³ Athletes in all sports have used Twitter as a way to comment on games, support charitable causes and endorse products.¹⁴ A content analysis of athletes’ tweets found that they tended to fall into several categories: interactions with fans; insider information about the team or the sport; discussion about other sports; promotions; links to other content; or general entertainment.¹⁵ Twitter also served to increase the level of direct fan interaction with athletes, including opportunities to share personal opinions, post photographs or respond to questions.^{16,17}

Twitter is an immersive process

Mahan¹⁸ used the Technology Acceptance Model (TAM) to investigate social media’s usefulness and capacity to create enjoyment for sports fans who consume internet content. The TAM has been used extensively to explain the use and adoption of various types of information systems, and to explore attitudes towards internet-based applications. This study confirmed that the convenience and time-saving characteristics of social media led consumers to enjoy these technologies and to perceive them as being useful. Specifically, Twitter was noted as a vehicle that allowed consumers to become ‘immersed’ in the interactive communication process through tweets and retweets.

Expression important to sports fans

Seo and Green¹⁹ developed an instrument to measure why consumers are motivated to view sports website content. This scale contained ten dimensions of motivation: information, entertainment, interpersonal communication, escape, [a way to] pass [the] time, fanship (identification as a fan), team support, fan expression, economic (eg a place to buy products) and technical knowledge (eg game rules). Many of these motivational factors could be extended to social media, such as meeting other fans and sharing opinions. In particular, Seo and Greene noted the importance of fan expression in community building and participation, a major part of communication strategies employed by sports marketers. The temporal aspect of information was not represented in the instrument, however, which is important for the time-sensitive nature of Twitter.

**Motivation drives
Twitter usage**

Motivations and constraints in using Twitter to follow professional athletes has been examined using Sports Twitter Consumption, a 12-item scale with four measures of motivation (information, entertainment, pass time and fandom) and four measures of constraints (accessibility, economic, skills and social).²⁰ The authors found that all four motivational factors affected fans' usage of Twitter in a positive manner. In addition, they suggested that sports organizations should take advantage of Twitter to increase opportunities for interaction and communication with fans, which, in turn, would lead to stronger relationship marketing opportunities.²⁰ The authors also stated that Twitter kept fans engaged with the players and the organization. When used strategically, Twitter provided an opportunity to attract, develop and retain fans.²⁰

**More content means
more value**

Value creation of Twitter content

In consumer research, value is defined as a cost/benefit proposition — if the benefits of consuming the product or service outweigh the costs (both tangible and intangible), then it has positive value. Further, functional value, which is defined in terms of utility, has been considered to be a factor in the choices made by consumers.^{21,22} To be valuable, social media must be seen as being worth the time and effort expended (eg learning curves). Social media also benefits from network effects — the more people use them, the more content there is, thereby increasing the likelihood of return engagement and the perception of content value.⁵

**Aligning processes with
value needs**

Marketers must understand the value system of consumers and recognize the role of internal processes in value generation.²³ Resources, product design elements and organizational processes must be consistently aligned with the value needs of consumers. Value is transferred and also created during the interaction process as customers look to fulfil needs and gain value on an ongoing basis.²⁴ The importance of opportunities has also been highlighted in terms of use in joint value creation to create a long-term 'win-win' for both parties.²⁵ Effective management is needed to ensure that the combined effects of planned communication and meaningful interactions lead to value-added outcomes for consumers.²⁴

**Sharing or retweeting
may indicate value**

There has been some attempt to categorize responses to Twitter feeds based on the actions someone would take. These tweets were identified²⁶ as belonging to a category related to information sharing termed as 'pass along'. This category included retweets that acknowledge the source tweet, URLs (often shortened) for a website, blog or photo/video-sharing site, or selective endorsement where users select and filter content to their followers from other sources. Lists of reasons to retweet including distributing breaking news or information, endorsing opinions and generating conversation around the tweet or for personal reasons (eg sharing with friends) have also been developed.²⁷ Boyd *et al.*²⁷ also suggested that retweets serve not just to disseminate information but also to validate that information and engage with the community. The value proposition might then be that 'of the moment' content has some inherent value and that endorsing tweets or otherwise highlighting them implies that

value can be added. It may be that users find tweets valuable by measures other than overt acts of sharing. The critical act of deciding to follow a feed in itself implies that the content is important. Valued content can then become a key tool in developing relationships with consumers and strengthening TI.

**Interaction,
communication and
value**

Relationship marketing

Relationship marketing was first introduced in the service marketing field and is now considered a part of contemporary marketing practice.²⁸ Relationship marketing emphasizes the retention and development of existing customers²⁹ and stresses the importance of interactions, relationships and networks as central components of the process.²⁵ Relationship marketing is defined as ‘the process of identifying and establishing, maintaining, enhancing and, when necessary, terminating relationships with customers and other stakeholders, so that the objectives of all parties are met’ (p. 101).²⁴ This process is designed to build long-term relationships with the organization’s best customers, generate further business and provide additional value for consumers. Relationship marketing is also an integrative process requiring three key elements: communication, interaction and value.²⁴ Focused attention, incorporating each component strategically, allows marketers to develop effective long-term relationships with customers.

**Shani framework for
sports relationships**

The sports industry has increasingly embraced the value of relationship marketing and a number of sports-specific models have been presented. Sports consumers are recognized ‘as highly involved consumers with a desire for long-term association with a team sport’, and Shani suggested that the sports performance element of the industry would benefit from relationship marketing approaches.³⁰ Sports marketers can benefit from developing a process beginning with the development of segmentation strategies and then moving along a continuum to recognizing the role of niche marketing and database marketing in developing a ‘rich and detailed’ (p. 14) platform for relationship marketing.³⁰

**Convergent model for
Australian sports**

In 2008, an extension of Shani’s framework within the context of Australian sports was developed.³¹ This model highlighted a projected convergence of relationship marketing with the increased sophistication and development of sports marketing practice. Organizational structure, research and a systematic use of relationship marketing strategies were highlighted as significant components of this model.

**Differential marketing
by sports**

How and why sports consumers engage in relationship marketing has also been investigated, and it was found that ‘relationships that are internalised and based on shared values have the deepest level of influence and are most durable and consistent’ (p. 109).³² Additional researchers^{33,34} have also examined the use of relationship marketing strategies within specific sports settings, including the dynamics of relationship marketing strategies used within the English Premier League that highlighted the different relational status of fans³³ and the successful implementation of relationship marketing within NASCA.³⁴ The impact of technology for sports marketers has also been explored on a limited basis along with

activities such as the use of internet-based contests in an attempt to enrich customer databases.³⁵ The communication preferences of baseball consumers have been examined and this highlights the need for organizations to embrace the potential of viral marketing, electronic word of mouth, social networking and blogging.³⁶ In 2013, Abeza *et al.*³⁷ further explored the use, opportunities and challenges in using social media in order to support relationship marketing strategies in sports organizations, and they suggested a focus on two-way communications with engaging dialogue.

Higher identification through content consumption and sharing

Team identification

Social identity theory³⁸ provides the theoretical underpinning when examining the concept of TI in sports settings. Social identity supports the notion that individuals have a personal identity (focused on individual characteristics) and a social identity (directed to others and feelings of group membership). Membership in a social group and the perception of group belonging may enhance a person's self-esteem and, often, a person's definition of self becomes linked to the group.³⁹ In many organizational settings, customers who are closely identified are considered more likely to feel a sense of connectedness.⁴⁰ The psychological connection of fans to a team allows a person to see the team as an extension of himself/herself.⁴¹ TI within sports organizations was defined as 'the personal commitment and emotional involvement customers have with a sports team' (p. 15).⁴² Perceived connectedness has also been found to impact the individual's involvement and investment within the group.

Identification even impacts logo design

A number of researchers have examined the concept of TI within sports settings, finding differences related to the level of identification. Individuals characterized as high in TI have been shown to attend more games,⁴³ pay more for tickets,⁴⁴ feel strong affiliations with fan members who supported their team,⁴² invest more time and money in support of their team, and perceive higher service quality in their interactions with the team.⁴⁵ In 2012, the impact of TI on fan perception and acceptance of newly designed team logos was investigated.⁴⁶ Highly identified fans were found to be more likely to hold negative opinions of new logo designs, and may be resistant towards the proposed changes. Finally, fans that consume online content develop significantly stronger affiliations with the team and, in turn, are more likely to attend sporting events.⁴⁷

Research methodology

The study was conducted in two phases, beginning with a preliminary assessment of basic categories of sports tweets. In phase two, a survey was used to obtain quantitative data relating to Twitter activity, TI and assessment of tweet value. The steps utilized in each phase are outlined below.

Assessment of tweet categories

As a preliminary step in assessing the value of tweets from a fan perspective, an attempt was made to verify basic categories of

sports-related tweets from the Boston Celtics twitter feed. A review of literature was conducted to determine whether prior research in the sports marketing and communication field had identified relevant categories. No sports-specific studies were found, although attempts have been made to classify tweets.²⁶ Appropriate categorization information from these studies was adapted for use in this exploratory study and the following categories were identified:

- Conversations/commentary/opinions (g1)
- News (g2)
- Community relations/charity (g3)
- Promotions/advertising/sales (g4)
- Fan-generated content (g5)

Classifying tweets into categories

In order to validate the classification categories of each tweet, a group of graduate business students ($N = 24$) was used. A description of the five categories was provided and participants were then asked to classify each individual tweet into one of the categories. Twenty-six tweets were classified using this methodology. Tweets that were not consistently classified into a specific category by at least 50 per cent of the participants were discarded from the study. Eight tweets were dropped, resulting in too few tweets to analyse within the Community relations and Fan-generated content categories. The remaining categories were used to comprise the research model described below.

Survey participants

Participants ($N = 162$) included undergraduate students at a New England university. Convenience sampling was used to enlist students from a variety of undergraduate business classes. The students were asked to complete the questionnaire as they viewed a variety of tweets from the Boston Celtics on a large projection screen. The questionnaire was administered during class, and of the 162 potential respondents, 133 useable responses were obtained, a response rate of 82 per cent.

Survey instrument

A 30-item questionnaire was constructed to measure participant perceptions in a number of areas related to TI and Twitter activity. The survey included 25 original items and an established 5-item, 7-point Likert TI scale.⁴¹ The questionnaire was organized into three sections. Section 1 focused on demographic data (eg year, gender, ethnicity) and basic Twitter use (eg 'Do you have a Twitter account?', 'How often do you tweet?'). Section 2 was used to gather information relating to TI. Section 3 asked participants to evaluate each tweet on a Likert-type scale ranging from 1 (very important) to 7 (not important). Participants rated each tweet based on its interest/importance and the likelihood of retweeting, sharing/posting, replying/responding and favouriting.

Results

Respondent profile

Descriptive statistics were calculated to provide demographic data on the respondents. Respondents were asked to identify their gender; 60 per cent were male and 40 per cent were female. Age representation included 18–22 year olds (58 per cent), 23–30 year olds (35 per cent) and

**Modelling
confirmatory factors**

over 30s (7 per cent), indicating that a majority of the participants were representative of the largest group of Twitter users (18–34 year olds). Reported ethnicity of the respondents was predominantly Caucasian (93 per cent).

Sixty per cent of respondents had a Twitter account and 64 per cent reported following sports on Twitter. Twitter activity is summarized in the frequency table (see Table 1) for the questionnaire item ‘How often do you tweet?’ Individual fan identification items varied (see Table 2), with roughly 40 per cent of participants not identifying with the Boston Celtics.

In order to address the research question relating to which constructs affect an individual’s interest in a specific category of sports-related tweets, participants were asked whether each of 26 tweets was important/interesting. The base research model (see Figure 1) uses confirmatory

Table 1: How often do you tweet?

	1 (very often)	2	3	4	5	6	7 (not often)	Mean (SD)
Tweet frequency	3	8	10	10	11	6	85	5.83 (1.79)

Table 2: Fan identification items

	1 (very)	2	3	4	5	6	7 (not)	Mean (SD)
Fan strength	8	15	15	16	12	19	48	4.94 (2.04)
Friend perceived fan strength	9	12	15	15	11	17	54	5.06 (2.06)
Dislike for Celtics rivals	14	16	15	14	11	9	54	4.77 (2.24)
Importance of Celtics win	14	11	9	19	12	11	57	4.99 (2.16)
Importance of being a fan	10	12	10	15	13	14	59	5.16 (2.08)

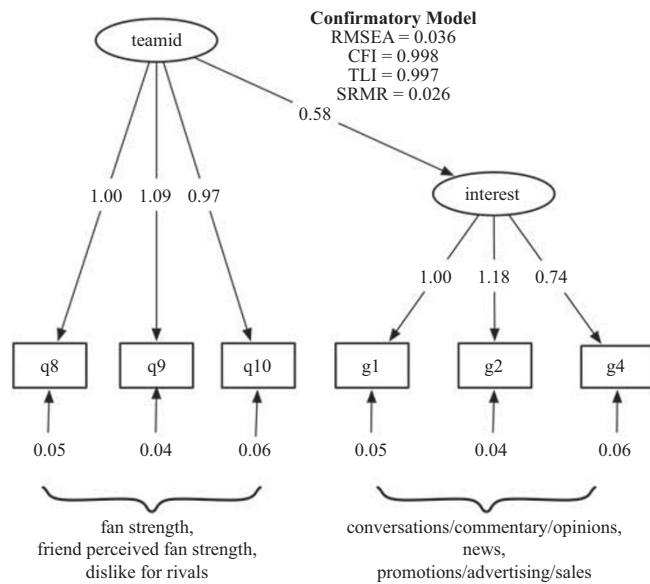


Figure 1: Confirmatory model

factor analysis to test the link between TI and interest in team-related tweets. Out of the eighteen remaining tweets, item-to-construct balance parcelling⁴⁸ was employed to parcel the relevant question, ‘How important/interesting is this tweet to you?’, into the three groups remaining (Conversations/commentary/opinions (g1), News (g2) and Promotions/advertising/sales (g4)). These three groups create the construct labelled interest. In the model, q8–10 represent the questionnaire items for TI and g1, g2 and g4 represent the parcels. Questions 8–10 were based on the metric to measure TI.⁴¹ Downward or horizontal arrows show the parameter estimates and upward arrows show error terms.

Modelling exploratory factors

Structural equation modelling (SEM) is a family of related procedure that explores research models ranging from confirmatory to exploratory.⁴⁷ SEM, using the lavaan package in R, was employed to confirm the proposed model. The Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) are reported. For SEM analysis, the sample size of 133 would be considered a medium-sized sample.⁴⁷

In SEM, the null hypothesis is that the postulated model holds in the population. In contrast to traditional statistical procedures, however, the researcher hopes not to reject the null hypothesis.⁴⁹ The base model successfully failed to reject the null hypothesis ($\chi^2 = 9.412$, $DF = 8$, $p = 0.309$). The model provides good fit (RMSEA = 0.036, CFI = 0.998, TLI = 0.997, SRMR = 0.026), and the regression modelling found the relationship between TI and interest significant ($p < 0.001$).

The exploratory model (see Figure 2) expanded the base model to examine gender and Twitter activity. Twitter activity was constructed from a single 7-point Likert item (ie How often do you tweet?). Dotted lines represent non-significant parameter estimates ($p > 0.05$).

Activity level on Twitter not a factor

The exploratory model (see Figure 2) failed to reject the null hypothesis ($\chi^2 = 18.87$, $DF = 16$, $p = 0.275$). The model provides good fit (RMSEA = 0.037, CFI = 0.996, TLI = 0.994, SRMR = 0.028), and the

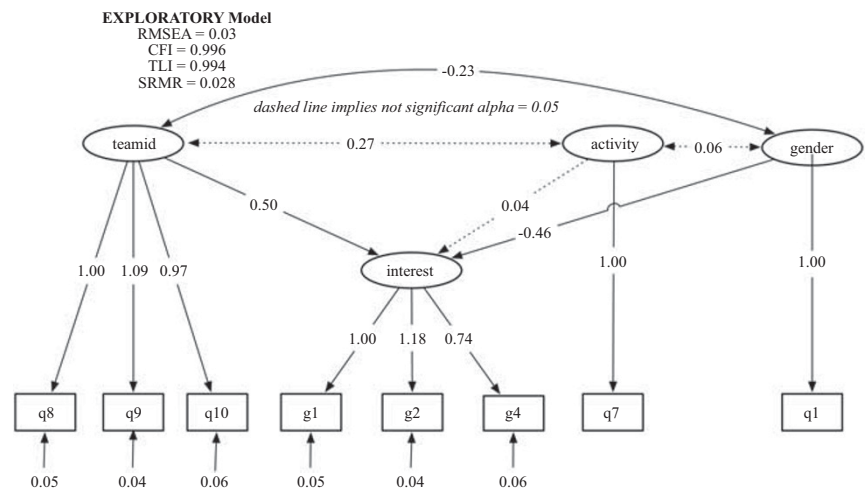


Figure 2: Exploratory model

regression modelling found the relationship between TI (teamid) and interest significant ($p < 0.001$) and gender and interest significant ($p = 0.009$). The relationship between Twitter activity (sharing via retweets, re-posts or 'favouriting') and interest was not significant ($p = 0.441$), nor was the relationship between Twitter activity and TI ($p = 0.35$), as well as Twitter activity and gender ($p = 0.351$). In short, Twitter activity was not found to contribute to the model.

Supporting a team drives interest in team tweets

In summary, the confirmatory model showing the relationship between TI and the level of interest in a tweet was supported, leading to the conclusion that identifying with the Boston Celtics did indeed increase the perceived interest associated with a team-specific tweet. The exploratory model added the constructs activity — measured by frequency of tweets — and gender. Activity was not found to contribute to the level of interest, but gender was. Specifically, males had a higher perceived level of interest for the selected Boston Celtics tweets.

News, commentary and promotions are clearly recognized categories

Discussion

The results of this preliminary investigation into the value of Twitter from sports fans' perspective have implications for social media administrators in sports organizations. From the categorization exercise, there is some confirmation that categories of tweets in the areas of news, conversations/commentary/opinions and promotions/advertising/sales are recognized as such, whereas tweets about community relations/charity and fan-generated content are less clearly defined for fans. This may imply that these types of tweets could be less relevant to followers.

Fans assign more value to tweets

The results of the survey suggest that more highly identified fans assign greater value to tweets. Recognition of valued content supports a more strategic use of this medium to communicate with fans in a manner that they find interesting and/or important. Sports fans have been recognized as 'highly involved consumers' who seek 'long-term associations' with teams.³⁰ Sports organizations should focus on Twitter content that is relevant and meaningful to fans and in doing so further develop and strengthen relationship with these fans. Use of Twitter gives fans instant access to breaking news and access to conversations on insider information or behind-the-scenes activity, which can increase fan involvement, strengthen associations and allow closer connections to the team.

Personalizing tweets pays off

The creation of value in a relationship marketing context occurs during the interaction process.^{24,50} Social media tools such as Twitter empower fans to share and also gives them the opportunity to be heard by the team and by other fans. Teams could modify their Twitter activity to become more targeted and develop strategies to increase the value of tweets by using a more personalized approach to meet the needs of specific groups of followers.¹¹ Teams can also attempt to use measures such as the number of times a post is re-tweeted as a method to assess the perceived value of particular tweets. Retweeting allows consumers to become increasingly immersed in interactive communications.¹⁸ The role of third-party champions and the benefits of network effects also have the

potential to add further value to a specific tweet as additional followers note increased activity and involvement.^{5,50}

Additionally, retweets could increase fan identification, and retweeting valued content provides an endorsement that implies that further value can be added.²⁶ Teams should pay careful attention to the level of retweeting activity attached to specific tweets as this can provide direction in terms of understanding fan interest levels. Retweets by third-party champions should also be monitored along with the response to those retweets.

Twitter users still tend to lurk rather than post

Overall activity levels of individuals in terms of personal tweets or posts was not significant in this study. Prior literature in the social media field has examined the issue of 'lurkers', a commonly used term to describe those who visit online communities but rarely contribute actively. Interestingly, lurkers still believe they are a part of the community and enjoy following the exchanges.⁵⁰⁻⁵² Sixty per cent of the respondents to this study reported that they had a Twitter account; however, 64 per cent stated that they rarely posted. Although lurkers typically visit but do not post, they do represent considerable value, and studies show that the majority of website visitors lurk rather than post.⁵² It is important for sports organizations to recognize that these followers exist and work to engage them. This is difficult as most lurkers prefer to be anonymous, but it is possible to use tools to track online behaviour.

Need to differentiate between posting and consuming

Limitations

A number of limitations should be recognized in interpreting the findings of this study. With regard to the classification exercise, the discovery of generally recognizable categories of sports tweets is relevant only to the extent that they apply to the sample. A more formal approach could be taken in a future study, perhaps using a sample of active Twitter followers. As for the survey, the use of convenience sampling of undergraduate college students may impact the findings and their general applicability, and further work is needed using a broader population more representative in age, ethnicity and region. Respondents also self-reported social media activities, which may lead to inaccuracies. The use of a single item to develop the 'Twitter activity' construct was limiting, indicating the need to further develop this construct. Indeed, there may actually be two constructs (ie one related to posting and the second related to consuming tweets). While the study was conducted to coincide with the Boston Celtics season and used actual Celtics tweets, the delay between the live tweet and the actual survey may have had a dampening effect on subject interest in tweets. Finally, the use of a single sport — NBA basketball — may also limit the general applicability of the findings.

Identify tweets that are calls to action

Conclusions and future research

The continued growth in the use of Twitter by sports organizations and the potential value of this tool in marketing and relationship building present numerous opportunities for further research. This study revealed

that Twitter is a valuable tool for those who strongly identify with the team. Additional work is needed to further examine specific tweets in those categories that might provide direction to digital media managers as they deploy Twitter content in a more strategic manner. Fan responses to individual tweets and categories of tweets should also be considered in future research. Retweets can be tracked and should be considered along with type of content and volume of retweets in a specific timeframe. Additional activity is also important as users respond to and share tweets. Which tweets are fans more likely to reply to, favourite or share? The lifespan of a tweet is relatively short and teams post numerous tweets in 1 day. Further research should also look at the impact of timing and lifespan of specific tweets. Finally, additional research is needed to assess why some fans become more involved in Twitter activity and others do not post and are content to lurk. In addition, the relationship between gender and TI/tweet interest needs to be further examined, as it is not supported by the literature.

Sports use of Twitter needs to become strategic

The growth in the use of Twitter by sports organizations is very evident and can easily be seen in hashtag promotions on playing surfaces and jerseys. Teams are tweeting year-round and providing varied content to followers. Sports teams are regularly seen in trending activity pre-game, during the game and post-game, highlighting the interest and attention this medium receives from fans. Many fans use multiple social media vehicles to consume sports, and Twitter offers a unique platform for engagement and interaction in real time. Fans are already on Twitter and are eager to consume relevant content. However, it is time for the use of this medium to become more sophisticated and strategic. Sports organizations need to be clear in developing goals and meeting the needs of fans. Tailored, focused content that is valuable to fans can be used to strengthen relationships in new ways and help to retain fans for a lifetime of involvement.

References

1. Zuk, R. (2009) 'Tweeting up with @THE_REAL_SHAQ: Phoenix Suns PR pros embrace Twitter', *Public Relations Tactics*, Vol. 16, No. 3, p. 12.
2. Bettman, G. (2010) 'Constant connection with fans is a key goal', *PR Week (U.S.)*, Vol. 13, No. 1, p. 25.
3. Hutchins, B. (2011) 'The acceleration of media sport culture', *Information, Communication and Society*, Vol. 14, No. 2, pp. 237–257.
4. O'Reilly, T. (2005) What is Web 2.0? Design patterns and business models for the next generation of software. Available at <http://oreilly.com/pub/a/web2/archive/what-is-web-20.html?page=1>, accessed 15 July 2014.
5. Gallaughar, J. (2011) *Information Systems: A Manager's Guide to Harnessing Technology Version 1.3*, Flatworld Knowledge, Irvington, NY.
6. Hernandez, B. A. (2012) Twitter rewind: Big highlights from 2012 to 2006. Available at <http://mashable.com/2012/03/21/history-of-twitter-timeline/>, accessed 15 July 2014.
7. Risen, T. (2013) Twitter IPO shows growth, need for ad revenue. Available at <http://www.usnews.com/news/articles/2013/10/04/twitter-ipo-shows-growth-need-for-ad-revenue>, accessed 15 July 2014.
8. Bullas, J. (2012) Pew Report: The demographics of Twitter users. Available at http://www.ragan.com/Main/Articles/Pew_Report_The_demographics_of_Twitter_users_44999.aspx, accessed 15 July 2014.

9. Cheng, A. and Evans, M. (2009) Inside Twitter: An in-depth look inside the Twitter world, Sysomos. Available at <http://www.sysomos.com/insidetwitter/>, accessed 15 July 2014.
10. Infographic: Breaking down who college students follow on social media. (2012) Available at http://www.huffingtonpost.com/2012/06/08/infographic-college-students-twitter-use_n_1581344.html, accessed 15 July 2014.
11. O'Shea, M. and Alonso, A. D. (2011) 'Opportunity or obstacle? A preliminary study of professional sport organisations in the age of social media', *International Journal of Sport Management and Marketing*, Vol. 10, No. 3, pp. 196–204.
12. Hambrick, M. E. (2012) 'Six degrees of information: Using social network analysis to explore the spread of information within social networks', *International Journal of Sport Communication*, Vol. 5, No. 3, pp. 16–34.
13. Fisher, E. (2009) Flight of fancy? Sports business journal. Available at <http://www.sportsbusinessdaily.com/Journal/Issues/2009/06/20090601/SBJ-In-Depth/Flight-Of-Fancy.aspx?hl=flightpercent20ofpercent20fancy&sc=0>, accessed 15 July 2014.
14. Hambrick, M. E. and Mahoney, T. Q. (2011) 'It's incredible — Trust me': Exploring the role of celebrity athletes as marketers in online social networks', *International Journal of Sport Management and Marketing*, Vol. 10, No. 3, pp. 161–179.
15. Hambrick, M. E., Simmons, J. M., Greenhalgh, G. P. and Greenwell, T. C. (2010) 'Understanding professional athletes' use of Twitter: A content analysis of athlete tweets', *International Journal of Sport Communication*, Vol. 3, No. 4, pp. 454–471.
16. Pegoraro, A. (2010) 'Look who's talking — Athletes on Twitter: A case study', *International Journal of Sport Communication*, Vol. 3, No. 4, pp. 501–514.
17. Thomas, J. A. 'Twitter: The sports media rookie', *Journal of Sports Media*, Vol. 6, No. 1, pp. 115–120.
18. Mahan, J. E. III. (2011) 'Examining the predictors of consumer response to sport marketing via digital social media', *International Journal of Sport Management and Marketing*, Vol. 9, No. 3/4, pp. 254–267.
19. Seo, W. J. and Green, B. C. (2008) 'Development of the motivation scale for sport online consumption', *Journal of Sport Management*, Vol. 22, No. 1, pp. 82–109.
20. Witkemper, C., Lim, C. H. and Waldberger, A. (2010) 'Social media and sports marketing: Examining the motivations and constraints of Twitter users', *Sport Marketing Quarterly*, Vol. 21, No. 3, pp. 170–183.
21. Sheth, J. N., Newman, B. I. and Gross, B. L. (1991) 'Why we buy what we buy: A theory of consumption values', *Journal of Business Research*, Vol. 22, No. 2, pp. 159–170.
22. Hamilton, R. W., Ratner, R. K. and Thompson, D. V. (2011) 'Outpacing others: When consumers value products based on relative usage frequency', *Journal of Consumer Research*, Vol. 37, No. 6, pp. 1079–1094.
23. Collins, B. (1999) 'Pairing relationship value and marketing', *Australasian Marketing Journal*, Vol. 7, No. 1, pp. 63–71.
24. Gronroos, C. (2004) 'The relationship marketing process: Communication, interaction, dialogue, value', *Journal of Business and Industrial Marketing*, Vol. 19, No. 2, pp. 99–113.
25. Gummesson, E. (1999) *Total Relationship Marketing*, Butterworth-Heinemann, Oxford, UK.
26. Dann, S. (2010) Twitter content classification. First Monday. 15(2) Available at <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2745/2681#p1>, accessed 15 July 2014.
27. Boyd, D., Golder, S. and Lotan, G. (2010) Tweet, tweet, retweet: Conversational aspects of retweeting on Twitter. Proceedings of HICSS-43 IEEE, Kauai, HI. Available at <http://www.danah.org/papers/TweetTweetRetweet.pdf>, accessed 7 July 2014.
28. Berry, L. L. (1983) 'Relationship marketing'. In Berry, L. L., Shostack, G. L. and Upah, G. (eds) *Emerging Perspectives on Services Marketing*, American Marketing Association, Chicago: pp. 25–28.
29. Copulsky, J. R. and Wolf, M. (1990) 'Relationship marketing: Positioning for the future', *Journal of Business Strategy*, Vol. 11, No. 4, pp. 16–20.
30. Shani, D. (1997) 'A framework for implementing relationship marketing in the sport industry', *Sport Marketing Quarterly*, Vol. 6, No. 2, pp. 9–15.

31. Stavros, C., Pope, N. K. and Winzar, H. (2008) 'Relationship marketing in Australian professional sport: An extension of the Shani framework', *Sport Marketing Quarterly*, Vol. 17, No. 3, pp. 135–145.
32. Bee, C. C. and Kahle, L. R. (2006) 'Relationship marketing in sports: A functional approach', *Sport Marketing Quarterly*, Vol. 15, No. 2, pp. 102–110.
33. Harris, L. C. and Ogbonna, E. (2009) 'The dynamics underlying service firm customer relationships: Insights from a study of English premier league soccer fans', *Journal of Service Research*, Vol. 10, No. 4, pp. 382–399.
34. Lapio, R. and Speter, K. M. (2000) 'NASCAR: A lesson in integrated and relationship marketing', *Sport Marketing Quarterly*, Vol. 9, No. 2, pp. 85–95.
35. Gladden, J. (1996) 'Sportsmarket bytes: The ever expanding impact of technology on sport Marketing: Part I', *Sport Marketing Quarterly*, Vol. 5, No. 3, pp. 13–14.
36. Greenwell, T. C. and Andrew, D. P. (2006) 'Communicating with different customer segments: A case from minor-league baseball'. In: James, J. D. (ed) *Sport Marketing Research across the Spectrum: Research from Emerging, Developing, and Established Scholars*, Fitness Information Technology, Morgantown, WV, pp. 157–164.
37. Abeza, G., O'Reilly, N. and Reid, I. (2013) 'Relationship marketing and social media in sport', *International Journal of Sport Communication*, Vol. 6, No. 2, pp. 120–142.
38. Tajfel, H. and Turner, J. C. (1986) 'The social identity theory of intergroup behavior'. In: Wordel, S. and Austen, W. (eds) *Psychology of Intergroup Relations*, Nelson-Hall, Chicago, pp. 7–24.
39. Bhattacharya, C. B., Rao, H. and Glynn, M. A. (1995) 'Understanding the bond of identification: An investigation of its correlates among art museum members', *Journal of Marketing*, Vol. 59, No. 4, pp. 46–57.
40. Mael, F. and Ashforth, B. E. (1992) 'Alumni and their alma mater: A partial test of the reformulated model of organisational identification', *Journal of Organisational Behavior*, Vol. 13, No. 2, pp. 103–123.
41. Wann, D. L. and Branscombe, N. R. (1993) 'Sports fans: Measuring degree of identification with their team', *International Journal of Sport Psychology*, Vol. 24, No. 1, pp. 1–17.
42. Sutton, W. A., McDonald, M. A., Milne, G. R. and Cimperman, A. J. (1997) 'Creating and fostering fan identification in professional sport', *Sport Marketing Quarterly*, Vol. 6, No. 1, pp. 15–29.
43. Madrigal, R. (1995) 'Cognitive and affective determinants of fan satisfaction with sporting event attendance', *Journal of Leisure Research*, Vol. 27, No. 3, pp. 205–227.
44. Wakefield, K. L. (1995) 'The pervasive effects of social influence on sporting event attendance', *Journal of Sport and Social*, Vol. 19, No. 4, pp. 335–351.
45. Gau, L., Gailliot, M. T. and Brady, M. (2006) 'A model examining relationships among team identification, sport spectators motives, perceived service quality, and satisfaction'. In: James, J. D. (ed) *Sport Marketing Research across the Spectrum: Research from Emerging, Developing, and Established Scholars*, Fitness Information Technology, Morgantown, WV, pp. 79–95.
46. Ahn, T., Suh, Y. I., Lee, J. K. and Perdersen, P. (2012) 'Sports fans and their teams redesigned logos: An examination of the moderating effects of team identification of attitude and purchase intention of team logoed merchandise', *Journal of Sport Management*, Vol. 27, No. 1, pp. 11–23.
47. Williams, J., Heiser, R. and Chinn, S. J. (2012) 'Social media posters and lurkers: The impact on team identification and game attendance in minor league baseball', *Journal of Direct, Data, Digital Marketing Practice*, Vol. 13, No. 4, pp. 295–319.
48. Little, T. D., Cunningham, W. A. and Shahar, G. (2002) 'To parcel or not to parcel: Exploring the question, weighing the merits', *Structural Equation Modeling*, Vol. 9, No. 2, pp. 151–173.
49. Kline, R. B. (2005) *Principles and Practice of Structural Equation Modeling*, 2nd edn. Guilford Press, New York.
50. Williams, J. and Chinn, S. J. (2010) 'Meeting relationship marketing goals through social media: A conceptual model for sport marketers', *International Journal of Sport Communication*, Vol. 3, No. 4, pp. 422–437.
51. Preece, J., Nonnecke, B. and Andrews, D. (2004) 'The top 5 reasons for lurking: Improving community experiences for everyone', *Computers in Human Behavior*, Vol. 20, No. 2, pp. 201–224.
52. Nonnecke, B. and Preece, J. (2000) 'Lurker demographics: Counting the silent', *CHI Letters*, Vol. 2, No. 1, pp. 73–80.