SOCIAL MEDIA INFLUENCE ON VIEWER ENGAGEMENT
Completed Research Paper

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Abstract
Society is being reshaped through Social Media. The case of Social Media integration into the London 2012 Olympics mainstream media coverage is used to demonstrate this. Social Media has modified television viewing from a passive to an active activity. It has also allowed opinions to be shared more quickly and broadly. Analysis of practical examples through the theoretical lens of sociomateriality demonstrates that greater use of the components in the ‘Theoretical Framework of Member Needs’ reflect the presence of viewers who are more active. This paper discusses the inability to separate the use of technology from its social context, the power of Social Media and the impact of this on business use of Social Media. It also demonstrates a novel method for evaluating the benefits of emerging technologies in society.

Keywords: Social media, Innovation, Media choice/selection, Member participation
Setting the scene

The London 2012 Olympics, held 27 July – 12 August 2012, incorporated Social Media as an innovative element of the overall event strategy to generate live discussions through the ‘Games of the XXX Olympiad online’. The application of Social Media to the London 2012 Olympics established a breakthrough forum for social interaction by bringing a social aspect to the consumption of official content and exchange of ideas about the Olympics. This creative integration of Social Media demonstrates an innovative strategy that engaged and inspired the public by opening up new avenues of communication (Wood 2003); it was argued to be a key contributor to the success of the London 2012 Olympics.

One significant difference between the London 2012 Olympics and previous Olympics was the level of ‘media buzz’ surrounding the event. Assessment of media buzz now includes both formal media publications and informal communication amongst online users about the services provided via word-of-mouth (Liu 2006); as the prevalence of Social Media and Social Networks has grown, so have the opportunities for sharing ideas and opinions, and for responding to others’ ideas and opinions. The very nature of these technologies facilitates enhanced media buzz, so the decision by the organizers of the London 2012 Olympics to embed this functionality in their website reflects a proactive approach to information management and public engagement. Offering this unique opportunity for the London 2012 Olympics enabled viewers to discuss and exchange ideas across the global network of online communities.

The benefits afforded by the integration of social elements into the London 2012 Olympics website were further enhanced by technological enhancements in recent years. Many of those using the website and its social features used portable devices (smart phones, tablets and laptops) rather than desktops. The ability to sit on the lounge and watch television while simultaneously using the Internet to access information about what you are watching (i.e. media multitasking) (Brasel and Gips 2011) is now widely accepted as the norm; a few years ago, this was uncommon. Since its introduction to society, people engaged with television as passive consumers of communication; viewers received communication but did not contribute to the exchange.

Media multitasking is an example of ‘dialogic communication’ – two-way, non-hierarchical exchanges that involve both sharing information (i.e. talking) and receiving information (i.e. listening). During the Olympics, people watched events (received information) while talking about them through Social Media (shared information). Dialogic communication embodies dialogic action, which is based on opinions and ideas that have been exchanged and negotiated (Kent and Taylor 1998). By engaging in these activities, viewers are no longer passive. Their role becomes an active one through their participation as content producers. Another author that has discussed this shift in culture is Jenkins (2006). In his book ‘Convergence Culture: Where old and new media collide’, he identified the relationships between three concepts: media convergence, participatory culture and collective intelligence. Jenkins (2006, p.3) stated that “convergence represents a cultural shift as consumers are encouraged to seek out new information and make connections among dispersed media content”. within a participatory culture, where the notions of ‘formal’ media producers and ‘spectator’ consumers are removed, and everyone now has the potential to become a participant. For example, the process of being active while consuming television is referred to as Social TV (Bulkeley 2010), which is the intersection between television broadcasting and Social Media. Social TV has created an opportunity for multichannel dialogic communication about what is being watched. Social Media lets viewers contribute to an exchange about what they are watching, thereby moving the television viewing experience from a passive to an active interaction with content. The move from passive consumption to active, dialogic communication has allowed users to become their own content creators, however the consequences of their interactions are largely unknown.

Traditionally, the discussion of live broadcast events such as the Olympics was limited to family, friends and neighbors. This limitation was maintained because, even though many people saw the event (received information), there was no platform to share information about it. Social Media provides such a platform, and the embedding of Social Media with mainstream communication channels such as the television broadcasters and official websites creates the linkages necessary to maximize engagement. Since the introduction of Social Media, the pool of people with which a viewer can immediately share opinions has grown to encompass the possibility of unlimited discussions within a global network of communities. As Dellarocas (2003) argued, the digitization of word-of-mouth has enabled each individual to make their opinions and thoughts accessible to the world. This demonstrates the impact of ‘evangelism’ – the
combination of digital content and word-of-mouth from the social web (which is built over time) causes a steady amplification of the information being discussed (Evans 2008). The embedded nature of Social Media as a component of the London 2012 Olympics communication channels enabled the use of a wide variety of tools, ranging from mobile platforms to online and conventional broadcast media that reached an audience of 4.8 billion people around the world (International Olympics Committee 2012). In Australia, the United Kingdom and the United States of America, over 80% of the population (in each of these countries) watched some scheduled event of the Olympics (Australian Communications and Media Authority 2013).

Social Media enabled viewers to access digital content created about the 10,568 competitors in the London 2012 Olympics (International Olympics Committee 2012) and communicated through the use of accessible and scalable online publishing technologies (Pitt et al. 2011). The consideration of the core design of the London 2012 Olympics website, embedding Social Media in event content delivery and the public creation of content based on their interpretations of the event, is a strategy that raises questions in relation to sociomateriality, i.e. the entanglement of the social with the material. This research addresses the important issue of how Information Systems (IS) can be theorized in relation to their shifting role in society at large. It is important to consider how Social Media, as an example of technology (the material), impacted on the viewers’ experience of the Olympics and how the viewers’ experience impacted on the technology.

New methods of investigation and theorizing about IS, in society at large as well as in organizations, are informing the core discussion of sociomateriality about the relationships between and ability to separate technologies, people and organizations (Kautz and Jensen 2013). Orlikowski (2007) framed the concept as the intertwining of both humans (the social) and technology (the material). Consideration of every element in a socio-technical interaction, and the impact of a change in any element, enables production and co-production of knowledge within the entire IS (Hassan and Hovorka 2011). The phenomenon within IS involves the use and consumption of Social Media (the material) by Olympic committees (the event organizers, both International Olympic Committee and each nation’s Olympic committee), sponsors, athletes and viewers (the social). The entanglement of this use and consumption with the traditional viewing experience of the event is a key component in sociomaterial analysis. The London 2012 Olympics is a prime example of how a live televised event can utilize the effects of the social (for example evangelism of the event by viewers who become engrossed in their experiences) through the broadcast of the content of the games across a wide network of communities.

As Scott and Orlikowski (2012) argue in their paper discussing accountability on the TripAdvisor website, the data stored by Social Media applications is encouraging the emergence of an “audit society” (Power 1997 cited in Scott and Orlikowski 2012). With this change in attitude, accountability of all involved in Social Media is becoming more heavily scrutinized. This study has the potential to introduce new phenomena within the ‘intra-action’ of the social with the material (see Kautz and Jensen 2013). To address this, a potential rethink in the way that these technologies are used is required. In their current form, Social Media is disruptive and has the potential to be game-changing if not managed appropriately by event organizers and major sponsors of international events (such as the Olympics).

The study of Social Media cannot be separated from its users and the event(s) they are discussing. Through these technologies, it is possible to view the sub-events (including formal individual sporting events, cultural events and social events) of the Olympic Games, not only in terms of actual achievements (e.g. who won the 100m men’s sprint) but also through the interpretations, perceptions and world-view of others. Social Media enables interaction beyond simply reading and posting. It allows each user to show approval for others’ posts (for example the process of ‘liking’) and provides the ability to deliver corrections to others’ posts (Scott and Orlikowski 2012). These issues have huge ramifications for all involved and therefore a deeper understanding of the consequences of technology use in these situations is of utmost importance. While it is important to establish and enforce policies for Social Media use, event organizers should not develop such policies in response to worst case scenarios; rather, they should engaged in considered reflection of the entanglement of Social Media with the event, the participants and viewers and seek to achieve a balanced approach.

Utilizing three different case studies of Social Media interactions that occurred during the London 2012 Olympics, this paper identifies the entangled social and material elements of these interactions, and theorizes about the consequences (both positive and negative) of this new paradigm.
Social technology use

The popularity of Social Network Sites (SNS) and proliferation of Social Media in most aspects of society enables online users to acquire extensive informal online content. These Social Media outlets prioritize ease of interface use to enable online users to navigate easily through their site (Rybalko and Seltzer 2010). Social Media as a tool for creating and accessing new markets was initially largely ignored by the business sector. However, many businesses have now shifted their perspective to actively incorporate Social Media approaches in their overall business strategies. It provides a free source of advertising, now being harnessed by businesses that understand the power of the evangelism effect. Sociomateriality plays a vital part in identifying Social Media and SNS as an IS phenomena demonstrating how it can reconfigure relations (Scott and Orlikowski 2012). Orlikowski (2007) comments on how sociomateriality encompasses the possibilities of the ‘everyday’, with activities organizing and shaping the greater world. Leonardi (2013) identifies the deliberate fusion of words in ‘sociomateriality’. Leonardi (2010) colloquially refers to ‘material’ as stuff, on the basis that material is not necessarily an object as it does not need to be tangible; the ‘social’ element concerns the actors of the network. The following section describes the impact of the concept of sociomateriality on Social Media, considers the organization of online users’ digital identities through online platforms, and discusses how interacting with these platforms impacts the individual.

The online environment has been described by some as an ecosystem to reflect its diversity of content in the form of networks, text, images (pictures) and videos (Berthon et al. 2012). One of the significant advantages of this environment is the opportunity for diversity and variety that its structure offers. The emergence of Social Media has firmly established a new type of content and style of interaction among users; its prominence reflects online users’ willingness to engage in communication via a collaborative platform, where the platform itself hosts the exchange of data (Mangold and Faulds 2009; Tan and Vasa 2011; Zhang et al. 2008). The general concept of Social Media embodies a vast range of elements identified by Mangold and Faulds (2009) as:

- Social Media outlets,
- Social Networking Sites (e.g. MySpace, Facebook),
- Creativity works sharing sites (e.g. YouTube, Flickr),
- Online blogs, including user-sponsored blogs (e.g. Cnet.com) and company-sponsored websites/blogs (e.g. Apple.com),
- Business Networking sites (e.g. LinkedIn),
- Consumer products, and
- Images and movies.

Due to the variety of Social Media outlets available online, businesses (in this context including television networks and Olympic organizations) must thoughtfully consider both the selection and application of Social Media for integration into any innovative strategy. The purpose of the interaction and the desired outcomes should inform any such choice – each Social Media outlet has unique structures, rules and interfaces that influence the user demographics, the information that can be collected and the ability to influence behaviors (Mangold and Faulds 2009). Different Social Media elements can be applied and combined to encourage specific interactions or to acquire online users’ opinions and feedback about particular aspects of a business or broadcasted event. Media outlets (including newspapers (both traditional and their online versions) and television broadcasters) and event organizers also need to be aware that they do not have control over how these technologies are used and the viewer of the event can use a technology that is not in the strategy of the business, which has the potential for both positive and negative consequences. According to Rogers (2003), “Consequences are the changes that occur to an individual or to a social system as a result of the adoption or rejection of an innovation” (p. 470). Rogers argues that consequences can be desirable or undesirable; direct or indirect; anticipated or unanticipated. The full effects of consequences are potentially not fully understood until an innovation has been in a society for a long period of time. Media outlets and event organizers usually consider the desirable, direct and anticipated consequences of Social Media adoption as part of their marketing strategy, however given
that they are not in control of the media, critical reflection on their choices and marketing strategies is needed.

Using Social Media in conjunction with traditional media; a viewer can apply some of their unused cognitive abilities to engage in debate about the topics presented to them, thus having the potential to increase knowledge in society. However, this shift has the potential to be undesirable, indirect and/or unanticipated (Rogers 2003) by media outlets and event organizers.

Social Media is a rapidly developing field. Changes since 2009 have been significant and more recent developments were not included in Mangold and Fauld’s (2009) elements of Social Media. The microblogging website Twitter allows users to post 140-character messages (i.e. tweets) which can be used to share consumption experiences (Yamamoto and Matsumura 2011), in essence Twitter is the convergence of a SNS and an online blog (with size restrictions). Another new Social Media application is Instagram which allows users to apply filters to photographs and then share these photos, both directly within the Instagram application and on other social networking sites that the user has linked to their Instagram account (Ladhani 2012). In essence, Instagram is the convergence of a Creativity works sharing site, SNS and a blog. For the purposes of this paper, both of these types of Social Media will be included in the umbrella group of SNSs. Instagram and Twitter share a common feature of hashtags. These allow users to relate the content they uploaded to a particular topic. This generates automatic relationships with topic areas and all other photos or tweets that share the common hashtag. Any user is able to create a new hashtag at anytime, with the process of using a hashtag automatically creating it. This lack of control of content and tagging of content creates the potential for unexpected consequences that are outside the control of the television broadcaster or event organizers. A simple example of this was the creation of the hashtag ‘#shutupeddie’ used in Australia to share disgust about the behavior of the commentator Eddie McGuire on the official Olympic broadcast channel during the Olympics closing ceremony (B&T 2012b). This hashtag and the associated content creation was outside the control of the broadcaster and was undesirable as it demonstrated negative viewer feedback about the event. The Australian Communications and Media Authority (2013) identified that overall public reaction through SNSs to the coverage by the public television broadcaster of the Olympics was identified as less than complementary (B&T 2012a).

SNS encompass human interactions and collaborations, and provide each user with a platform on which connections can be established and maintained (Montpetit 2009; Zyl 2009). The services provided by SNS have had a visible and quantifiable impact on personal contacts and relationships due to their impressive growth (Bertohn et al. 2012; Cha et al. 2012). An awareness of the shift that has occurred, away from the individual and towards the collective, allows the power of relationships to be leveraged (Berthon et al. 2012). This also contributes to an understanding of why and how SNS integrate a variety of communication modes (i.e. more than just text, pictures and videos) (Berthon et al. 2012) to enhance engagement and build these links. While all SNS seek to facilitate online social interaction, they have different areas of focus and offer varied services (Hughes et al. 2012). Evans (2008) identified two unique types of social networks: personal social networks (referring to socially driven contact tools such as Facebook) and business social networks (focused on business purposes, as with LinkedIn). This paper focuses on the consequences generated though the use of personal social networks and considers whether these interactions have positive or negative consequences, informing the interplay between Social Media and society.

Theoretical review: Member needs

The concern of sociomateriality is the relationship between materialities and meanings as found in everyday practices (Barad 2007; Introna 2007; Suchman 2007 cited in Orlikowski 2010). Treating Social Media as ‘materiality’ that is embedded in everyday life for online users under the theory of sociomateriality allows an understanding that Social Media impacts on the meanings found in the life of each user, and that the experiences of each user in other areas of life impact on his/her interaction with Social Media. Applying this understanding to the London 2012 Olympics, people who used the Social Media components offered as part of the Olympics’ strategy participated in online collaboration and communication, therefore users of Social Media were potentially impacted in many ways through this interaction. This participation and the related impacts may have led to positive or negative consequences.
To assess the use and configurations of Social Media during the London 2012 Olympics, Wang and Fesenmaier’s (2004) ‘Theoretical Framework of Member Needs’ is applied to understand the complex interactions of the social with the material. It should be noted that this proposed framework by Wang and Fesenmaier built on their prior work and was tailored towards the participation of users within traditional online travel communities to satisfy functional, social, psychological and hedonic needs (Wang and Fesenmaier 2004). Web 2.0 technologies, such as current Social Media outlets, were not in existence when the framework was created, however it still has relevance to these current technologies (Zhivov et al. 2011). It can be argued that the notion of sociomateriality can be theorized further with the utilization of this framework as the elucidation of the four needs (functional, social, psychological and hedonic) allows further clarifications of the actors and their entanglement with Social Media.

![Figure 1. Theoretical Framework of Member Needs, Source: (Wang and Fesenmaier 2004)](image)

The characteristics of the needs of members who exist within online communities, as specified in this theoretical framework, include:

- **Functional**: the fulfillment of specific member activities within the community is identified by functional needs (Wang and Fesenmaier 2004). Zhivov et al.’s (2011) utilization and interpretation of this framework implies that this type of online user requires efficient methods of communication with other participants through convenient means.

- **Hedonic**: in this context, online users are ‘pleasure seekers’. They engage in a wide range of activities including fun, entertainment and amusement to elicit enjoyment (Wang and Fesenmaier 2004).

- **Psychological**: this relates to the overall participation within the online community, encompassing a sense of belonging, affiliation with other online users and the expression of identity (Wang and Fesenmaier 2004). Zhivov et al. (2011) state, in the context of Web 2.0, that communities are based on building affiliation as well as identification. This contributes to members’ sense of belonging. One such example is the SNS Facebook.

- **Social**: online communities flourish when online users have the ability to interact and reciprocate in a set environment of trust where social norms are established (Zhivov et al. 2011).

Three case studies were used in this research to understand the impact of Social Media influence on the traditional media consumer (television and newspapers) and online community. The case study methodology employs independent observation of factors to investigate a phenomenon within the actual
context (Myers 2005). According to Creswell (2003), case study research can be interpretive research and when this philosophical perspective is used it requires the researcher to become familiar with the environment. For this study, this involved developing a program based on the SNSs’ Application Programming Interfaces (APIs) to download messages associated with the case studies and manually coding these messages for relevance and themes. This process allowed the characteristics of Wang and Fesenmaier’s (2004) theoretical framework to be identified within their real-life context (Yin 2003). This allowed the researchers to understand the entanglement of SNS use within the events associated with the London 2012 Olympics.

**Australian swimmers outcry of ‘shooting’**

The first case used in this paper to examine the entanglement of Social Media (particularly SNSs) and its users is one involving Australian Olympic swimmer, Kenrick Monk. Monk posted a contentious photograph to the SNS Facebook which led to increased attention on the individuals in the photograph throughout the Games by media and officials. The photograph portrayed two Australian swimmers – Nick D’Arcy and Kenrick Monk – posing while holding weapons in a gun shop while they were in California where they were training (Langmaid 2012), initially intended for Monk’s personal community of Facebook followers. The response was a prime example of the effects of evangelism in this online community. Traditional media outlets (newspapers) identified that the weapons featured in the photo were similar to those used in the Virginia Tech and Port Arthur massacres (Langmaid 2012) (although incorrect and identified by blog posters, a functional information feature of dialogic communication). Thus, developing unintended consequences for Monk (the person who posted the image) and creating a larger community involved in the event. Langmaid (2012), a newspaper reporter, expressed the view of the Australian chef de mission Nick Green in response to the photograph as: “These postings today are foolish and clearly inappropriate for members of the 2012 Australian Olympic Team.” Reader feedback to the online newspaper article by Langmaid by consumers (in the form of a blog commenting section) largely advocated that Monk had done nothing wrong.

The reaction of the Australian Olympic Committee (AOC) to the publicized photograph of D’Arcy and Monk was to send both swimmers home at the conclusion of their Olympic events in London, essentially removing the potential for these athletes to disrupt others within the team. The verdict from the AOC was furthered extended to include a self-imposed ban on the use of SNSs (Twitter, Facebook and blogging) for the duration of the London 2012 Olympics from 16 July to 15 August (Tucker 2012). Considering SNSs as an innovation, this ban could be considered as an undesirable and unanticipated consequence of the two swimmers’ actions, based on Rogers’ (2003) classifications. While Monk and Swimming Australia came to agree that the athletes’ activities on the shooting range would be labeled as fun, the issue at hand was the uploading of the actual photo (Tucker 2012). The AOC has faced claims of hypocrisy over the image after it was revealed that Swimming Australia had arranged the rifle range visit and shooting session in 2007 as part of an official training camp (Tucker 2012). Further photos from 2007 featured other swimming athletes, Eamon Sullivan and Libby Trickett, firing weapons at the ‘bonding session’. Sullivan backed D’Arcy and Monk in this matter, commenting publicly through Social Media that: “Shooting is an Olympic sport and shooters don’t get into trouble for posing in their speedos.” (Tucker 2012) (Note: speedos are a colloquial term (and brand) for swimming attire).

Perceptions of the photograph uploaded to the SNS triggered debate and potential negative consequences for the sport as well as the personal and professional images of the athletes involved (Tucker 2012). Despite these high profile negative responses, other responses to similar indicate different, confusing or inconsistent perceptions of what is acceptable. While the AOC’s response to the uploaded photograph of D’Arcy and Monk’s resulted in a SNS ban and required them to come home early from the Olympics, their reaction to a separate Social Media event reveals a different principle and perception. One Australian newspaper noted this inconsistency: ‘Meanwhile, a 32-year-old athlete from Hoppers Crossing who is representing Australia in skeet shooting is posing for a men’s magazine wearing nothing but a bikini and a rifle – but has been given the all clear by the AOC’” (Tucker 2012). Objectively, hypocrisy is apparent. When the reason for this hypocrisy is explored, sociomateriality provides one explanation – the entanglement between the use of SNSs and the perceptions of officials differs depending on broader contexts of society.
Analysis of responses to the photograph reveals the different interpretations of the AOC compared to SNS users. The public’s reaction to the content of the photograph of D’Arcy and Monk was captured through the use of polls and comments in traditional media. On his newspaper’s website, Langmaid (2012) conducted an online newspaper poll. About 80% (7,200 votes) of respondents did not support any disciplinary action for D’Arcy and Monk in relation to the photo; similar sentiments were reflected in Tucker’s (2012) poll. The lack of concern from the public, contrasted against the AOC’s response, raises questions about appropriate uses of SNSs by individuals involved in events such as the Olympics. Clarification about the expectations for misuse (or breach of social expectations) is also required. Given that the Olympics promotes the ideal of ‘the greater good’, it is worth considering whether the motivation for such actions is relevant in determining responses to SNS use.

Despite widespread public support for D’Arcy and Monk in relation to the initial photograph, LondonNow (was a website owned and operated by News Corp, which is one of Australia’s largest media companies) uncovered photos uploaded by Monk to Facebook on the Sunday before their SNS ban ended (Ballantyne 2012) indicating a breach of the penalties imposed by the AOC. The photograph featured Monk and D’Arcy enjoying a luxury yacht at sea with friends. This new photograph ignited discussion on an Australian breakfast morning television program about the photographs and Social Media in general (Ballantyne 2012). This discussion is linked to the concept of the level of accountability, as previously discussed, where actions on SNS are increasingly scrutinized.

Quade Cooper (a professional Rugby Union player in Australia (for the national team) who had previously been in a relationship with another Olympic swimmer Stephanie Rice (thereby believing that he had insight into the situation)) utilized his significant influence on the SNS site Twitter to support Monk and D’Arcy; a social relationship component of Wang and Fesenmaier’s (2004) framework. With approximately half a million followers, Cooper sent Tweets supporting the idea that the two swimmers deserved a holiday after they had competed in their events at the Olympics (Ballantyne 2012). This action was in direct contrast to that ordered in the decision by the AOC, who instructed the swimmers to return to Australia at the completion of their events.

Cooper sent the following Tweet, implying that the intense level of preparation undertaken by the athletes before the London Games meant they deserved a holiday:

“Can’t believe the morning show are having a go at the swimmers for having a holiday” (cited in Ballantyne 2012)

A Twitter user, ‘NathD’ replied to Cooper’s tweet to challenge the focus and meaning of the tweet.

“No offence @QuadeCooper but Australia were piss poor at this years Olympics #noshow” (cited in Ballantyne 2012).

Despite this defense on the SNS Twitter, the photograph of the two swimmers holidaying demonstrated a breech of both penalties imposed by the AOC – to return directly to Australia, and to not engage with SNSs for a specified period of time.

**Theoretical framework analysis & Australian swimmers outcry of ‘shooting’**

The functional component of the framework is based on how specific activities are completed by members when they use online communities (Wang and Fesenmaier 2004). In this case, the activity of utilizing Social Media outlets and the SNS Facebook to upload the photograph is a functional information-sharing component. The photograph caused media coverage as both D’Arcy and Monk were posing with rifles in a gun shop. The details of this upload activity involved utilizing an efficient and convenient method of communication to inform D’Arcy and Monk’s ‘friends’ on Facebook (a personal online community) about an event in the athletes’ personal lives.

This specific activity also involved a hedonic component which reflects the enjoyment, fun, amusement and entertainment value of such activities for consumers (Wang and Fesenmaier 2004). While in California D’Arcy and Monk engaged in a variety of typical activities including posing with guns for entertainment and fun.

However, the examination of the psychological (belonging and identification) and social (involvement) components of this framework informs the negative reaction by the AOC; particularly as
the AOC is responsible for the Australian Olympic team and their associated community. They resulted in the AOC instructing that D’Arcy and Monk be sent home at the conclusion of their events, which essentially removed the potential for these athletes to disrupt others within the team. This decision was made despite the fact that the photograph uploaded to Facebook can be identified as hedonic in nature.

The psychological component involves the overall participation within the online community, which encompasses the sense of belonging, the affiliation with other online users and the expression of identity (Wang and Fesenmaier 2004). This psychological component requires consideration of both the community of swimmers who participated in the organized shooting session at a rifle range in 2007 (Tucker 2012) as a form of a bonding session, as well as the teammate Sullivan showing support for D’Arcy and Monk through Social Media due to a sense of belonging in the community of Olympic swimmers. This is furthered extended towards the social aspect of the framework. The social component, heavily embedded in the ability of online users to interact and reciprocate in a set environment of trust with social norms (Zhivov et al. 2011), is again supported by the public message of support from the teammate Sullivan even after the two swimmers breeched both the AOC rulings.

There are clear links between these components, which facilitated the progression of this case. Cooper used the SNS Twitter (functional (efficiency and convenience) and social communication components) to engage in the online community as a platform to respond to an Australian morning show’s discussion of the Social Media ban of D’Arcy and Monk. This triggered the social involvement component of the online Twitter community engaging with Cooper, including the user ‘NathD’ responding to Cooper’s tweet. This reflects the participation of online users to fulfill their sense of belonging by responding to other users.

**Officials and sponsors of London 2012 Olympics**

The second case study examines how officials and sponsors of the London 2012 Olympics used the SNS outlet Twitter throughout the duration of the games. An analysis of the utilization of the official Australian Twitter account highlights the practice of evangelism. As stated previously, evangelism is based on the combination of word-of-mouth and the digital content that is built over time using Social Media, thereby causing steady amplification of the message (Evans 2008).

The amplification of word-of-mouth and digital content expressed via Twitter feedback from the Officials and Sponsors involved unique strategies, including:

“Sally Pearson you Champion!! #supersally #goaussies pic.twitter.com/jjcTRcF8”[@AUSOlympicTeam]

“[PHOTO] Showing us her #Gold medals and GB flag with pride at @TeamGB House-it’s @LauraTrott31 #OurGreatestTeam pic.twitter.com/4730yHhx”[@TeamGB]

These two select tweets from @AUSOlympicTeam and @TeamGB demonstrate how Twitter accounts can be used as a congratulatory tool for recognizing an athlete’s performance. Both tweets used the hashtag functionality to facilitate amplification of the posts and hence amplification of the message. @AUSOlympicTeam associated their tweet with the topics #supersally and #goaussies, which helped achieve the evangelism reach of 557 retweets and 70 favorites. The Twitter account @TeamGB used the hashtag topics of #Gold and #OurGreatestTeam and directed the conversation of this tweet towards Laura Trott’s own Twitter account. This contributed to 319 retweets and 91 favorites. Considering the sociomateriality of these interactions, there is clear entanglement between the Tweets and the interactions of users. The ability for a Twitter user to retweet a message illustrates their ability to leverage information, influence society and contribute to changing perceptions about an athlete’s performance. According to the Australian Communications and Media Authority (2013), 81% of the Australian population watched the Olympics on television. Of these people, just under a quarter of viewers then accessed Games content online via another device.

The SNSs of Twitter and Instagram were used as ‘free’ online promotional tools and an integral part of the overall strategy of Swisse Vitamins (located in Melbourne Australia). This was used in conjunction with traditional advertising in other media outlets. Swisse Vitamins utilized these outlets to promote competitions:
“For your chance to win, complete this sentence “I'm an Everyday Olympic Basketball Champion because…” #everydayolympian” Instagram.com/p/OC8oSUQ9Ao

This Tweet that contained an external link to Instagram received two retweets. While this sounds insignificant, one of these retweets was by Elizabeth Cambage [@ecambage] who, at the time, had over 25,000 followers. This is an example of the effects of evangelism, and demonstrates the broadcast potential reach of digital content based on a network-of-networks. The hashtag topic competition #everydayolympian by Swisse Vitamins posted a different question (or sport) daily in the Twitter ecosystem to build audience involvement.

Swisse Vitamins (2012a) website stated that the selected winners would receive daily prizes from Swisse. An example of Swisse Vitamin’s approach to further promote #everydayolympian by communicating the daily winner and prize is seen below in the tweet:

“Congratulations to #bridegt_bailey1, winner of these fencing swords for her #everydayolympian tweet entry yesterday! http://t.co/6m7FpML9” [@SwisseVitamins]

The competition enabled the winner to ‘relive Olympic moments every day’ and contextualize these based on personal experiences. Despite the success achieved through this competition, these evangelical efforts raised the potential for undesirable consequences. Cadel Evans was an international cyclist and Tour de France champion, an Olympic Games Ambassador for Swisse Vitamins, and an athlete representing Australia at the London 2012 Olympics.

The Swisse website stated: “How does it feel to be training in the lead up to the London 2012 games? Special! It is always a special feeling to represent your country at the Olympics” (Swisse 2012b). The Swisse Vitamins’ Twitter Account even promoted Cadel Evans in the lead-up to the London 2012 Olympics:

“Just hours until the 2012 Tour de France kicks off with a Prologue in Liège. Do you think @CadelOfficial will retain his title? #tdf” [@SwisseVitamins]

“Not long now until #TourdeFrance. We have a big month ahead with minimal sleep. Go @CadelOfficial! http://t.co/rHG3bv3a” [@SwisseVitamins]

“@CadelOfficial is in the groove… #tdf #tdf12 http://t.co/skNGqfQb” [@SwisseVitamins]

It was evident from media coverage prior to the event that Evans felt privileged to be able to represent Australia at the London 2012 Olympics. However, Evans withdrew from his event at the London 2012 Olympics due to fatigue. Even after his withdrawal, there were still television advertisements by Swisse Vitamins promoting ‘Cadel Evans relies on Swisse to fight fatigue’ (ian 2012), which provided even greater content for negative discussion. Magnay (2012) claimed that Cadel Evans saw the head team doctor and cycling doctor before making the public decision of withdrawing, resulting in even further public reaction to Cadel Evan’s withdrawal through Twitter:

“So if Cadel Evans endorses Swisse Vitamins... and fading batting talent Ricky Ponting endorses them... maybe they need MORE Swisse vitamins!” (Twitter 2012). [@antsharwood]

This tweet received two replies, extending further negative public reaction based on the overall image of Swisse Vitamins and Cadel Evans.

“@antsharwood or maybe you don’t feel better on Swisse” [@martinsmith87]

“@antsharwood note that frequency of the ‘Cadel’ ads has faded to be replaced by...(gulp)...track & field atheletes! Well see KHunt ads next!” [@Phikl_]

The following tweet received a single reply back with a retweet count of 2.

“Cadel Evans is sponsored by Swisse vitamins and pulls out of Olympics race due to fatigue. #irony” [@philjohnson72]

As noted above, while this retweet count is low, the reply was ultimately favorited by a user (@s_deery) with 479 followers at the time, again reinforcing the reach created by evangelism.
“@philjohnson72 You need drugs, not vitamins to recover from TDF that quickly”
[@love_lentils]

With all of these Twitter messages being sent and resent, the ability to influence society through SMSs changed, resulting in undesirable consequences for Swisse Vitamins. Although having an initial desirable strategy of how they were going to use SNSs through their competition, sponsorship of underperforming athletes resulted in unanticipated and undesirable consequences for the business. Event sponsors need to carefully consider their interactions with SNSs and the ramifications that using this technology plays on their overall strategy, and be aware that any message publically posted has the ability to alter society in both positive and negative ways.

Theoretical framework analysis & Officials and sponsors

This case highlighted the proactive campaigns of officials and sponsors to engage viewers during the Olympics. From the officials’ perspective, they were able to employ the functional (information and convenience) components of the framework to support their athletes in a convenient way to further publicize gold medal achievements. The continuing publication of these messages (retweets) by members of the online community could be associated with them seeing the event through other forms of media (including television), and wanting to support the winning athlete (social involvement component).

The hedonic component is illustrated by the enjoyment of supporting athletes who are representing their country at the Olympics. The enjoyment element demonstrates how Twitter can be used to support athletes and also contribute towards promoting a competition hosted by Swisse Vitamins as an official sponsor of the Australian Olympic Team. These examples represent the activities that a user can embark on to increase their engagement throughout the Olympics without the physical requirement of being present at the games. The daily competition developed by Swisse Vitamins also supports the hedonic components. It provided entertainment, amusement and fun as the online community created and viewed the entries in the competition.

The psychological component explores the overall participation within the community. It encompasses the sense of belonging and affiliation with other users and the expression of an online identity (Wang and Fesenmaier 2004). The sense of belonging associated with these examples reflects the potential for user involvement in participating in the support of athletes.

Changing nature of the Olympics: Samsung USA and Omega Watches

The third case study is the use of SNSs by official sponsors of the Olympics or sponsors of individual Olympic teams. The Samsung USA [@SamsungMobileUS] and Omega Watches [@omegawatches] cases aim to provide insight about how the use of SNSs at the London 2012 Olympics has changed the nature of sports viewing from pure consumption to the ubiquitous advertising of brands. These Official Sponsors at the London 2012 Olympics each used SNSs to facilitate word-of-mouth exchanges of digital content across the social platforms.

The first example, Samsung Mobile US [@SamsungMobileUS], used SNSs as a marketing strategy across its potential consumer market. This strategy involved increasing recognition and awareness of the ‘Galaxy SIII mobile phone’ product. The following is a select tweet that contained an external link to another Social Media site, YouTube:

”With the #GalaxySIII, you can keep sharing the Olympic Spirit! See how: http://t.co/4U4J6Gvi” [@SamsungMobileUS]

The clip (the link in the tweet) was an advertisement about the Galaxy SIII in action, however the theme of the clip focused on a key aspect of the London 2012 Olympics – the torch. This was demonstrated through the Galaxy SIII’s tap technology of sending content from one Galaxy SIII to another. Through this interaction, the material (consisting of both the SNS used and the Galaxy SIII device) influenced the social. If this message was retweeted to others then the social had the potential to start influencing the adoption of the device (the material) with both becoming entangled and unable to be cleanly separated for review. This would be a desirable consequence for Samsung’s sponsorship of the London 2012 Olympics, resulting in increased sales of a new product.
Another Olympic sponsor, Omega Watches [@omegawatches], used SNSs as a promotional tool for both their devices and their ambassadors. These different messages are highlighted in the following tweets:

“On the 8th of August, OMEGA recorded 21.88 sec in the women’s 200m sprint. #London2012” [@omegawatches]

“OMEGA congratulates its Olympic medal-winning ambassadors: @LeClos_Swim @NatalieCoughlin @J_Ennis Qiu Bo @JennSuhr @TysonLGay @MichaelPhelps” [@omegawatches]

Omega Watches used Twitter as a source of promotion and recognition of their product throughout the duration of the Olympics. Omega Watches had a clear vision of how to use SNSs to their advantage. Use of their Twitter account as a broadcast channel to followers allowed them to apply traditional media rules to a dialogic communication medium. While this approach demonstrates limited innovation with the technology, Omega Watches did not experience the negative consequences of other innovative approaches (e.g., Swisse Vitamins). The outcomes of their Olympics experience resulted in them introducing new technologies to their marketing approach, but not engaging with the social elements that these new technologies afforded. While this may limit the undesirable and unanticipated consequences of adoption of Social Media it demonstrates an unwillingness to be creative in their adoption. This could have indirect consequences in the future.

**Theoretical framework analysis & Samsung USA and Omega Watches**

The implementation of the framework in the context of Samsung USA and Omega Watches, as sponsors of the London 2012 Olympics, falls into several categories of the framework. Both sponsors had strategies developing advertisements through the demonstration of select products (Wells et al. 2008).

For the Samsung USA case study, the **functional (information and efficiency)** components of the framework aims to involve efficient methods of communication with other members of the community (Zhivov et al. 2011). In the context of the Olympics, products belonging to these sponsors delivered ‘active community members’ with a demonstration of the products, showcasing their key features. This method of advertisement, directed towards Social Media outlets (e.g. YouTube), invokes the **social** component of the framework, as the member needs to become involved to see the advertisement. Online users have the ability to interact and reciprocate in an environment of trust where social norms are established with the sponsors (Zhivov et al. 2011). The **psychological** component is unique in this context. It relies on the overall participation within the online community that encompasses the sense of belonging with other users and expression of identity (Wang and Fesenmaier 2004). The sense of belonging in this community involves select individuals from the community including ‘active viewers’ who identify with the brand advertised.

For the Omega Watches case study, the use of the SNS Twitter as a broadcast medium meant that it only supported the **functional information-sharing** component of the framework.

**Overall analysis: London 2012 Olympics**

This paper has argued that Wang and Fesenmaier’s (2004) ‘Theoretical Framework of Member Needs’ is applicable to the concept of sociomateriality in that each of the member needs is a part of the entanglement of the material with the social. These concepts of the material and the social are clearly identified and embedded in the core design of a user’s participation in SNSs, as demonstrated through the examples provided from the London 2012 Olympics. Table 1, below, summarizes the aspects of Wang and Fesenmaier’s (2004) ‘Theoretical Framework of Member Needs’ in relation to the London 2012 Olympics. The ‘X’ denotes the feature(s) evident within each component associated with each of the three case studies (i.e. the Australian swimmers outcry of ‘shooting’; Officials & sponsors; and Samsung USA & Omega Watches). This illustrates the features of user involvement with SNSs. In some cases these interactions with Social Media outlets have occurred simultaneously with the use of other media outlets.
Table 1. Theoretical Framework of Member Needs Results: London 2012 Olympics

<table>
<thead>
<tr>
<th></th>
<th>Australian swimmers outcry of ‘shooting’</th>
<th>Officials &amp; sponsors</th>
<th>Samsung USA &amp; Omega Watches</th>
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<tbody>
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<td>Functional</td>
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<td></td>
<td>Efficiency</td>
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<td>Psychological</td>
<td>Affiliation</td>
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Analysis of the implementation of the ‘Theoretical Framework of Member Needs’ (Table 1 above) shows the various characteristics associated with the Functional, Psychological, Hedonic and Social components, as analyzed after each of the case studies. This paper noted the influence of these characteristics (where relevant) in relation to each of the cases presented. A strong presence of these characteristics (and hence the higher level components) in any case suggests a high level ‘active viewer’ involvement. The Australian swimmers case study was one such example. In this first case study, all four components of the framework have been identified to some extent. In contrast, it can be concluded from both the discussion and Table 1 that there was a much lower level of ‘active’ involvement in the Samsung USA & Omega Watches case studies. Reflecting on the Omega Watches case study, where the company employed a broadcast-only approach to their SNS interactions, only the functional component of the framework was used. Omega Watches did not fully engage with all of the online community members’ needs. This reduced their potential for effective dialogic communication with customers, as SNSs offer greater customer engagement, making a customer more fully engaged with the brand.

Social Media outlets in this context have been used to identify how technologies provide an integral component of the opportunities for improving society, however at the same time, Social Media particularly has the ability to rapidly and strongly influence societal views and expectations. This, in turn, alters the society. Rogers’ (2003) understanding of the nature of innovations and their consequences highlights that, while SNS use may initially seem desirable, direct and anticipated for businesses involved in events such as the Olympics, consideration is required. It is important to develop procedures for dealing with potential undesirable and unanticipated consequences of technologies. If businesses establish a greater understanding of the entanglement between the material and the social, adoption of SNSs as part of an innovative strategy can be developed in a more structured and effective manner rather than using the ad-hoc process that were applied during the London 2012 Olympics.
Final remarks

The importance of embracing and unpacking engagement of SNSs as part of a new research stream of IS has been analyzed throughout this paper.

The application of an understanding of sociomateriality to existing SNS strategies provides a new structure for enhancing the adoption of social technologies for business gain. This paper has used the ‘Theoretical Framework of Member Needs’ to structure discussion about the level of viewer engagement in three cases related to the London 2012 Olympics within the context of sociomateriality. Application of this Framework has demonstrated a clear relationship between the presence of member needs components and an increased level of engagement by online community members. However, understanding the reasons for employing SNSs as part of a strategy needs to be carefully defined. While active engagement is often the key goal of business use of SNSs for business gain, the cases should act as a warning; an understanding of the consequences of such a strategy is critical when examining the entanglement of the material with the social. Despite some negative outcomes, the integration of SNS with main communication channels for the London 2012 Olympics was a key factor in the high visibility of the event. This factor was highlighted with the event organizers embedding SNSs into the official website and marketing of the Olympics, based on organizers’ desire to create a greater ‘media buzz’ around the Olympics. Facebook had nine times more users than during the 2008 Beijing Olympics. In 2012, there were 116 million posts and comments on Facebook and 150 million tweets about the Olympics (Australian Communications and Media Authority 2013).

Evans’ (2008) concept of evangelism has been identified as important through the case studies, because an individual’s message can now be accessible across the world. In the first case study, a photo posted on Facebook led to increased scrutiny of the athletes in both traditional media outlets and on SNSs. Given this experience, there is the potential to extend Wang and Fesenmaier’s (2004) ‘Theoretical Framework of Member Needs’, which only focused on the internal online community of travel websites; using a sociomateriality perspective, the community is constantly adapting through their engagement with social media. The original model was focused on closed community. A further extension that has been identified and demonstrated in this paper is that the framework is also applicable to open communities (television viewers, online newspaper readers and social media engagers); however, member needs are not all applicable as long-term community engagement is not required. This is different to Wang and Fesenmaier’s (2004) original focus, which was on creating long-term community engagement for the travel community.

This paper has highlighted the issue of accountability in SNSs; this has supported previous research about sociomateriality (Scott and Orlikowski 2012). From the perspective of Wang and Fesenmaier’s (2004) ‘Theoretical Framework of Member Needs’, individual SNS users felt compelled to correct other posts (social involvement and trust component). This has implications for businesses and media outlets, as they must now be more vigilant than in the past at ensuring that the information that they provide to the public is accurate. The evangelistic nature of SNS means that inaccurate information can now cause greater damage to an organization.

While SNSs can damage an individual’s or organization’s reputation, they provide potential for a groundswell of support from other SNS users of all backgrounds. This study has demonstrated that SNS also has the potential to highlight hypocrisy in society. Broader social aspects must be considered when making such evaluations, and linkages across SNS outlets have the ability to influence and manipulate public perceptions, as shown by the three case studies in this paper. Social Media has the potential to damage the reputation of businesses involved in event sponsorship. By engaging in the use of Social Media, a business is exposed to further scrutiny through the same technology. Careful engagement is required to minimize potential public backlash, as long-term consequences of SNS usage by business is not fully understood. However, it is not all negative. The adoption of Social Media (particularly SNSs) can create positive outcomes and consequences for businesses and media outlets. The evangelical nature of Social Media demonstrates the social and psychological benefits of belonging to a social movement that encourages individuals to succeed.

With businesses’ adoption of Social Media being relatively new, innovative methods of understanding the consequences of both adoption and non-adoption need to be researched. This paper has provided an initial understanding of how Social Media use can influence and impact what is presented to viewers.
What needs to be understood and researched further is that it is not possible to research the technological affordances of Social Media without considering the social possibilities offered by this (and any future) technology.

References


Evans, D. 2008. Social Media Marketing. Wiley


