

---

Citation:

Popp, B and Woratschek, H (2015) Introducing branded communities in sport for building strong brand relations in social media. *Sport Management Review*, 19 (2). 183 - 197. ISSN 1441-3523  
DOI: <https://doi.org/10.1016/j.smr.2015.06.001>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/2680/>

Document Version:

Article (Accepted Version)

---

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on [openaccess@leedsbeckett.ac.uk](mailto:openaccess@leedsbeckett.ac.uk) and we will investigate on a case-by-case basis.

## **Introducing branded communities in sport for building strong brand relations in social media**

### **Authors:**

Bastian Popp<sup>a\*</sup> and Herbert Woratschek<sup>b</sup>

<sup>a</sup>University of Bayreuth, Department of Services Management, Universitaetsstrasse 30,  
95447 Bayreuth, Germany,  
Tel. +49-921-55-6138, Fax +49-921-55-3496, [bastian.popp@uni-bayreuth.de](mailto:bastian.popp@uni-bayreuth.de)

<sup>b</sup>University of Bayreuth, Department of Services Management, Universitaetsstrasse 30,  
95447 Bayreuth, Germany,  
Tel. +49-921-55-3497, Fax +49-921-55-3496, [d1m@uni-bayreuth.de](mailto:d1m@uni-bayreuth.de)

\* Corresponding author

**Keywords:** branded communities; brand communities; customer loyalty; sponsorship; social media; branding, co-creation

### **Citation:**

Popp, Bastian, & Woratschek, Herbert (2016). Introducing branded communities in sport for building strong brand relations in social media. *Sport Management Review*, 19(2), 183-197.

[doi: 10.1016/j.smr.2015.06.001](https://doi.org/10.1016/j.smr.2015.06.001)

## **Abstract**

Brand communities have become an important aspect for brand management in social media. However, many brands have failed to establish a successful online brand community. In this study, we introduce *branded* communities as an alternative concept to brand communities. In contrast to brand communities, a branded community does not revolve around a specific brand, but around any interest or need. However, a specific brand makes use of the community for marketing purposes by sponsoring or operating the community. We emphasize the suitability of sport as an interest around which branded communities can be built as well as links of branded communities to sport sponsorship. We empirically studied the factors which influenced the success of this phenomenon and the effects of operating or sponsoring such a community for a brand by using an online survey (N = 501) among members of a branded online community relating to football and operated by the largest German telephone company. The results indicate that topic interest (i.e. identification and involvement with football) leads to an interest in a branded community on that topic. Further, community interest is paramount for greater community loyalty; however, the quality of the community also contributes to community loyalty. The brand owner benefits from an increase in brand loyalty for those community members who are aware of the brand as the operator of the community. Surprisingly, awareness of this sponsorship does not decrease loyalty towards the community. Our research contributes to previous knowledge by proving that branded communities are an effective means to deploy sponsorship and branding strategies in social media. Hence, we see branded communities as a promising concept for brands which do not have the potential to facilitate enduring customer interaction themselves. Therefore, brand managers must identify a common interest which is both strong enough to facilitate enduring social interaction and also fits the brand concerned. Given that sport is a perfect example to do so, sport managers are advised to recognize branded communities as a promising means to

generate value.

**Keywords:** branded communities; brand communities; customer loyalty; sponsorship; social media; branding, co-creation

**Highlights:**

- We propose *branded* communities as an alternative concept to brand communities.
- We study a branded community relating to football operated by a telephone company.
- Interest in the topic/community and high community quality lead to community loyalty.
- The sponsoring/operating brand benefits from an increase in brand loyalty.
- Sport offers a perfect context for deploying branded communities.

## 1 Introduction

The creation of virtual communities has been and remains an important aspect of web marketing theory. Especially brand communities, i.e. communities which are built around a specific brand, have been the subject of considerable interest in the last few years (e.g., Algesheimer, Dholakia, & Herrmann, 2005; Muniz & O'Guinn, 2001; Pongsakornrungrungsilp & Schroeder, 2011). Emerging research on social media emphasizes that this phenomenon will become even more important in the future (Laroche, Habibi, & Richard, 2013; Zaglia, 2013). Past research has shown that interactions in brand communities influence the members' (but also non-members') attitudes and behavior regarding the brand (Algesheimer, Borle, Dholakia, & Singh, 2010). In particular, positive effects of brand communities on several brand objectives (e.g. customer satisfaction, brand loyalty, feedback, and product innovation) have been empirically proven in various contexts such as sports (Pongsakornrungrungsilp & Schroeder, 2011; Won, Green, Yong, Seunghwan, & Schenewark, 2007; Woolf, Heere, & Walker, 2013), Apple user communities (Muniz & Schau, 2005), the Harley Davidson Owners Group (Bagozzi & Dholakia, 2006), Hummer drivers (Luedicke, 2006), but also convenience products such as Nutella (Cova & Pace, 2006). Consequently, many major brands (e.g. Coca Cola, IKEA, VW, BMW) have tried to build and maintain their own respective brand communities, and some of them have achieved considerable sustained success in doing so (e.g. Dell Community Forum with over 1.4 million registered users in 2008 (Ant's Eye View, 2008)).

However, not every brand has the potential to be the basis of enduring interaction with and among its customers, so that several companies (e.g. E.ON, Deutsche Telekom) were forced to close their brand communities shortly after employing substantial financial and marketing efforts in their establishment. Those brands lacking potential as the basis of a brand community are obliged to look for other ways of building meaningful relationships in the

online environment, thus benefiting from the current trend towards social media and away from brand pages (Hutton & Fosdick, 2011).

One possible strategy used by brand managers to integrate online communities into their branding activities is sponsoring or operating a community on *any* topic, i.e. the community is centered on an arbitrary interest and not on a specific brand. This topic may be strongly related to the brand itself (e.g. Bosch as a manufacturer of tools for tradesmen operating [www.1-2-do.com](http://www.1-2-do.com), a community for DIY enthusiasts) or have no direct link to the brand itself (e.g. [www.kochbar.de](http://www.kochbar.de), a community for sharing cooking recipes). To cover these phenomena, this paper introduces the concept of ‘branded communities’ as an alternative to ‘brand communities’. In contrast to brand communities, a branded community does not revolve around a specific brand, but around any interest or need. However, a specific brand makes use of the community for marketing purposes by sponsoring or operating the community.

Branded communities pick up recent publications which suggest that online communities may offer worthwhile strategies for brand management and sponsorships. For example, in a research synthesis of the extant literature on online brand communities, Wirtz et al. (2013) propose that brands with less strongly developed identities may build online brand communities which focus on a wider shared interest rather than on the brand itself. Moreover, Meenaghan, McLoughlin, and McCormack (2013) consider the deployment of sponsorship toward social media opportunities, e.g. sponsored blogs, as a key challenge in sponsorship. However, empirical evidence that highlights the worth of branded communities or branded social media is still required. Therefore, the purpose of this paper is to define branded communities and discuss likely economic potential.

Given the similarity of branded communities to a sponsorship and the fact that sport is known to be a particular strong interest in terms of group cohesion, answers to these questions

seem to be particularly interesting from a sport management perspective. Successful sports-based branded communities (e.g. Deutsche Telekom as a telecommunication company operating [www.fussball.de](http://www.fussball.de), an online community focused on football) indicate both companies' expectations of using sport-related social media as a means for establishing and maintaining long-term relationships with consumers and substantiate the relevance of this phenomenon in sport. As a result, it is highly relevant to shed light on the phenomenon of branded communities using a branded community from the sport context.

The present article therefore makes a twofold contribution to previous research: First, it generally introduces the phenomenon of branded communities, provides its theoretical foundations and a corresponding generally valid framework for branded communities. This framework both highlights (1) what factors lead to the success of a branded community and (2) the effects of operating or sponsoring a community for a brand. Second, the general framework is empirically tested using a branded community focusing on sport thereby providing implications both for the use of branded communities as a marketing tool in general as well as an innovative strategy for marketing through sport. In doing so, we provide an innovative example how brands may use social media strategically into the important area of building and strengthening brand relationships in the sport context (Filo, Lock, & Karg, 2014).

The remainder of the article is organized as follows: We first describe the theoretical background of branded communities and demarcate this phenomenon from brand communities. Subsequently, we provide a conceptual framework for our study and derive the hypothesis of our conceptual model. Thereafter, a structural model is tested using a branded online community relating to football. Based on the findings of this study, we discuss general managerial implications and implications for sport managers who need to recognize branded communities as a valuable way to sell sport. Finally, we address limitations of our research

and highlight recommendations for further research.

## **2 Theoretical Background**

The leverage of communities for business objectives has primarily been promoted by Hagel and Armstrong's work on virtual communities, which was the first to extensively study the "dispersed group of people who share interest and expertise in a specific topic" (1997, p. 18). In the last few years, the continued growth of social media has increased the importance of this field of research with many firms now implementing online-based customer community marketing programs (Algesheimer et al., 2010; Jahn & Kunz, 2012). Indeed, the World Wide Web provides an excellent forum for customer interaction both with a company and with other customers at low costs. Lastly, the prevalent adoption of smartphones and tablet PCs has finally enabled consumers to share their feelings or experiences with others. Thus, online communities exhibit many aspects of contemporary social life and are of great relevance to their members (Jahn & Kunz, 2012).

In particular, community participants stand out for high levels of engagement in the community and their associated brands (Bagozzi & Dholakia, 2006). The strong relationships between community members can be explained by social identity theory (Tajfel & Turner, 1979) which assumes that individuals derive part of their self-concept from "knowledge of their membership in a social group together with the value and emotional significance attached to that membership" (Tajfel, 1982, p. 255). Members of communities feel intrinsically connected, because they share similar interests, values, thoughts and philosophies of life (Muniz & O'Guinn, 2001). This common link between community members leads to a close connection between members and other members as well as between and associated organization, even in the absence of face-to-face contact. The characteristics of communities therefore offer specific marketing strategies for community operators and third party companies and the dyadic relationship between company and customer is broadened to a



multidimensional relationship network among companies and customers (Muniz & O'Guinn, 2001).

Marketers are interested in the impact of virtual communities on brand management. Especially brand communities, i.e. communities, which focus on a specific brand, have been in the focus of interest among researchers and practitioners. According to Muniz and O'Guinn (2001, p. 412) a brand community can be defined as a “specialized, non-geographically bound community, based on a structured set of social relationships among admirers of a brand”. In this specific type of community, the shared identity of brand community members originates from member commonalities regarding a specific brand. In other words, the brand serves as the central linking mechanism in brand communities and leads to interaction among members and their loyalty towards the community (McAlexander, Schouten, & Koenig, 2002).

From a theoretical point of view, brand communities broaden the dyadic relationship between customer and brand. The interaction among community members affects members' perceptions of a brand and influences their relationship and attitudes to the brand (Algesheimer et al., 2010). Empirical studies have revealed several positive aspects of brand communities including increases in brand involvement, brand loyalty and positive word-of-mouth behavior (Bagozzi & Dholakia, 2006; Stokburger-Sauer, 2010). Brand owners also use communities for market research (Kozinets, 2002), integrate community members into new product development processes (Füller, Matzler, & Hoppe, 2008) and outsource customer support to community members (Bagozzi & Dholakia, 2006; Muniz & O'Guinn, 2001). Therefore, members of a brand community are regarded as both beneficiaries and providers in the value co-creation process (Pongsakornrungrungsilp & Schroeder, 2011). Consequently, marketers support the development and maintenance of brand communities and believe that their facilitation is both cost effective and powerful (Algesheimer et al., 2005).

However, not every brand is able to serve as the basis for enduring customer

interaction. For this reason, some researchers have studied the suitability of a brand for the brand community concept and identified some key factors which facilitate the group building process (Davidson, McNeill, & Ferguson, 2007; McAlexander et al., 2002; Muniz & O'Guinn, 2001; O'Guinn & Muniz, 2005). Their results reveal that brand communities often form around unusual and unconventional brands, or those with a strong and well-defined image, a low market share, a long tradition or those threatened by competitors. Furthermore, consumers should be highly involved and able to identify with a brand, and the brand should be of great importance in consumers' everyday lives. Public consumption and the existence of interactivity also increases the potential for brand-related communication among the customers. These antecedents of brand community formation explain why some organizations have failed to establish a successful online brand community of late. In fact, only a few brands (e.g. sports clubs and other high involvement brands) stir up sufficient emotions to induce consumers to converse with others on that brand over an extended period of time. Moreover, in recent years, brands have been challenged by a clearly observable shift away from corporate brand websites to social media platforms (Hutton & Fosdick, 2011). As a consequence, other methods of branding involving social networks and online communities ought to be studied and implemented.

We suggest that companies operate or sponsor online communities, even if there appears to be no obvious link between the community and the company. We define such a community of people sharing their interest and expertise in a specific topic which is sponsored or operated by a specific brand for marketing purposes as a "branded community". In contrast to brand communities, this community does not focus on a specific brand, but is "branded" by the sponsoring or operating brand in order to gain positive effects for company success. The community and the brand are strongly associated with each other, which is expressed by either acting as a strategic sponsor of the community or by operating it. The

transition between these both forms of brand's engagement in a community of interest may be smooth and sometimes not obvious for the community members. Therefore, we see neither a clear distinction between both types of branded communities nor do we expect significantly different results for their effectiveness. However, we would like to emphasize that in the case of branded communities, unlike banner advertisements or sponsored stories in communities, the branding has a strategic nuance and emphasizes a strategic relationship between the community and the brand for a longer period of time. Moreover, branded communities significantly differ from sport events which are carried out or sponsored by a specific brand (Javalgi, Traylor, Gross, & Lampman, 1994) as participants exhibit a much stronger psychological sense of community, i.e. the degree to which an individual perceives relational bonds with other individuals (Carlson, Suter, & Brown, 2008).

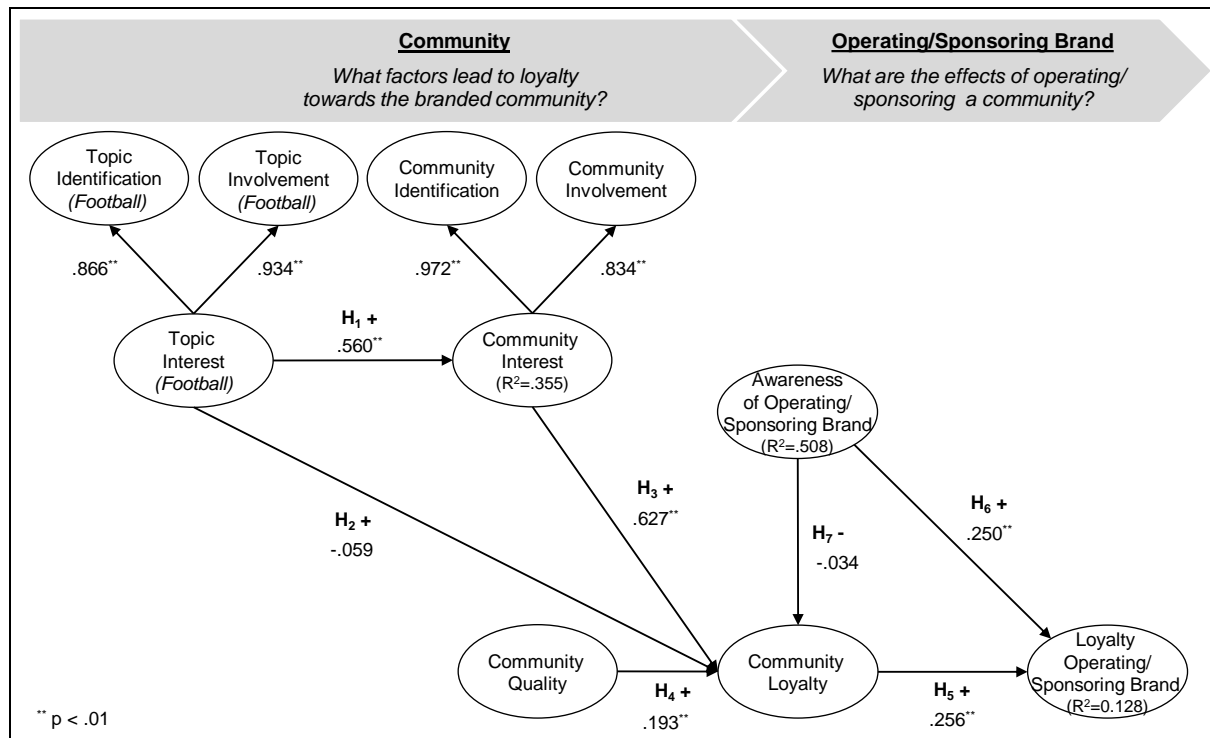
The likely success of a "branded community" strategy can be extrapolated from other fields of research in branding. For example, empirical studies reveal that brand alliances and co-branding strategies can be a viable means of transferring attitudes from a brand to a website and vice versa (Delgado-Ballester & Hernández-Espallardo, 2008). Furthermore, branded contents, for instance brand placement in digital games or virtual worlds (Molesworth, 2006), serve as a kind of branded entertainment and have been proven to enhance brand image. Authors investigating incidental exposure effects in marketing support these findings by revealing that even incidental exposure to brands during games influences consumer decisions (Acar, 2007). Based on these lines of reasoning, we assume that operating or sponsoring a virtual community positively affects attitudes towards the operating or sponsoring brand.

In research on online communities, similar image transfer processes have already been studied in the open source software development, using developer communities sponsored by software firms as an example (West & Lakhani, 2008). The academic literature also considers

communities of practice, a subset of communities whose members regularly engage in sharing and learning, and found positive effects on organizational performance (Dignum & Eden, 2005; Lesser & Storck, 2001). However, less attention has been paid to operating, sponsoring or branding communities whose members share interests other than the aim of improving personal knowledge or organizational results. To our knowledge, only Gribbins, Lauf, Subramaniam, and Shaw (2002) cover P&G's e-commerce strategy and the sponsorship of consumer packaged-goods-related communities. Mathwick et al. (2008) study a virtual peer-to-peer problem-solving (P3) community focused on software for digital media creation and editing which is sponsored by a company whose products are discussed within the community. However, there is no research on the sponsorship of communities for topics not directly related to the sponsor's products or services. Therefore, further research is needed to investigate the use of branded communities in marketing.

### **3 Conceptual Framework and Research Hypotheses**

Our conceptual framework which is illustrated in Figure 1 posits a model of causal relationships between basic indicators of success of branded communities. Specifically, we identify the driving forces of branded communities that lead to loyalty towards the community and towards the operating or sponsoring brand. Therefore, both the relationship between community members and the community, and between community members and the sponsoring or operating brand are studied. For both the community and the sponsoring or operating brand the community member's loyalty towards the community or towards the sponsoring or operating brand was chosen as a target variable, since this construct has been proven to be a suitable indicator of economic success both in online and offline environments (Shankar, Smith, & Rangaswamy, 2003).

**Figure 1: Conceptual Model, Hypotheses and Empirical Results**

### 3.1 Relationship towards the Community

Our first step is to focus on the loyalty of the members towards the community and on the antecedents of this construct. In line with Oliver's (1999, p. 34) definition of brand loyalty we define community loyalty as a deeply held commitment to revisit or recommend a preferred community consistently in the future. Community managers traditionally attach great importance to community loyalty, since it is considered to be a key factor in community success and sustainability over time (Holland & Baker, 2001). Therefore, we will subsequently present the main antecedents of loyalty towards a community of interest in which people share interest and expertise in a specific topic (Hagel & Armstrong, 1997).

The fundamental reason to participate in such a community by definition is given by its members' common interest in a topic. In order to conceptualize this interest, we draw on social identity theory (Tajfel & Turner, 1979) and the individual's involvement (Zaichkowsky, 1985) with the community. Although both constructs originate from different

conceptual domains both identification (Bagozzi & Dholakia, 2006; Carlson et al., 2008; Woisetschlager, Hartleb, & Blut, 2008) and involvement (Andersen, 2005) have been used for measuring an individual's interest in an (online) community. In these publications, both constructs have separately been identified as major reasons for engaging in communities. That is why we consider identification and involvement to be overlapping, but alternative expressions of an individual's interest in a topic. Whereas consumer identification is mainly based on social identity theory and represents "the perception, the value and the emotional significance of oneness with or belongingness to the organization" (Wieseke, Ahearne, Lam, & van Dick, 2009, p. 123), involvement has been defined as an "an unobservable state of motivation, arousal or interest" (Rothschild, 1984, p. 217). In previous research, emotional involvement is commonly considered as a component of identification (e.g., Ellemers, Kortekaas, & Ouwerkerk, 1999; Sutton, McDonald, Milne, & Cimperman, 1997) and it especially represents the perceived relevance of an object to an individual consumer based on his or her inherent values, needs, and interests (Zaichkowsky, 1985). Hence, both constructs are related to some degree, yet they are conceptually distinct expressions of consumer affiliation with a certain topic. Therefore, both constructs are used as first-order dimensions of a reflective second-order construct (Wetzels, Odekerken-Schröder, & van Oppen, 2009) representing the interest in a specific topic.

Further, we recognize that within the context of communities interest does not necessarily lie (solely) in the topic of the community, but it also can be targeted at the community itself which represents a separate entity and consists of many more aspects than the topic it is focused on. However, a relationship between both interest in a topic and interest in a community on that topic lies on hand, since by definition a community is based on a specific common interest and builds around this interest (Hagel & Armstrong, 1997). In other words, communities represent the appearance of a specific topic and individuals interested in

this topic are more likely to be interested in the community. We therefore propose:

*H<sub>1</sub>: The stronger the interest in a topic, the stronger the interest in a community on that topic.*

In the case of branded communities, we consider members' interest in the topic of the community (or in the community), as a key driver of community loyalty. People who identify strongly with a specific topic benefit from their engagement with it and with a community on that topic. They derive part of their self-concept from it and aim to maintain a positive self-defining relationship. In line with these considerations, empirical research has proven that identification exerts a positive effect on community loyalty (Algesheimer et al., 2005). Moreover, Berger and Schwarz (2011) emphasize the important role of consumer interest for ongoing online interactions, since there is no need to fill conversational gaps in the online space. Quester and Lim (2003) also demonstrate that involvement (as an important facet of interest) exerts a positive influence on loyalty intentions. Thus, we assume that a member's interest in a topic either directly or indirectly (via interest in the community) promotes community loyalty. Moreover, these arguments equivalently apply to the community as object of interest and its relationship with community loyalty:

*H<sub>2</sub>: The stronger the interest in a topic, the stronger the loyalty towards a community on that topic.*

*H<sub>3</sub>: The stronger the interest in a community, the stronger the loyalty towards the community.*

Previous research on the key drivers for establishing successful (brand) communities has also demonstrated the relevance of a broad set of characteristics of communities which primarily relate to the quality of the community (Casaló, Flavián, & Guinalú, 2007; von Loewenfeld, 2006; Woisetschläger et al., 2008). We draw on these findings and conceptualize the construct of *community quality* as an overall measure of the quality of the relationships

among consumers, their participation in the community and the quality of the community's features. In particular, it covers the social benefits obtained from networking with other community members (Rosenbaum, 2008), customization of a website, such as user profiles with personal information, pictures and videos, and customer participation (Holland & Baker, 2001; Woisetschläger et al., 2008). In line with the psychological sense of community and the social identity theory, we assume that these community-specific aspects are particularly important, since participation and customization efforts by community members link them to the community which is imbued by their own personalities. Several studies focusing on outcomes of customer participation reinforce this assumption. For example, customer participation has been shown to strengthen loyalty towards websites (Holland & Baker, 2001). These findings have been extended to brand communities where Casaló, Flavián, and Guinalíu (2007) reveal that participation in virtual brand communities fosters loyalty to the community. Woisetschläger, Hartleb, and Blut (2008) substantiate these findings and emphasize the strong positive effects of consumer participation on brand community loyalty. Besides participation, a hypothesized positive effect of community quality on community loyalty is corroborated by elements of community quality which go back to interactivity and entertainment. Research on these aspects has found positive effects from increased levels of entertainment and interactivity on loyalty to promotional websites (Raney, Arpan, Pashupati, & Brill, 2003). These considerations lead us to the following hypothesis:

*H4: The higher the community quality, the greater the member loyalty towards the community.*

### **3.2 Relationship towards the Sponsoring or Operating Brand**

Our conceptualization so far characterizes causal relationships between community-related constructs. However, in a branded community both the community-related content and the brand jointly appear on the community's website, so that the boundaries between the



community (e.g. user interaction, information, and entertainment) and the sponsoring or operating brand (advertisements) are often blurred (Santomier, 2008). Hence, the engagement of a brand in the community leads to relationships between the community and the brand, which are worthy of study in order to prove the economic value of this concept. Therefore, we extend our conceptual model to include aspects related to a company which sponsors or operates the community.

From a brand's perspective, the strategy to engage in a community has to be evaluated on the basis of a brand's goals. In the case of a branded community where a company sponsors or operates the non-brand-specific community this means determining whether the anticipated positive effects for the brand can be observed. Again, we choose the loyalty of community members as our main focus, since it is a generally accepted and powerful indicator of corporate success (Oliver, 1999). Thus, in our research setting, we differentiate between two different "owners" of loyalty (Palmatier, Scheer, & Steenkamp, 2007). On the one hand, community members can be loyal towards the community; on the other hand, their loyalty towards the sponsoring or operating brand can be measured.

A relationship between both loyalty constructs can be derived from a substantial body of theory suggesting that individuals try to maintain consistency between their cognitions and attitudes, and consequently give similar responses to similar questions. In consumer research, this phenomenon is known as the consistency motif (Johns, 1994; Podsakoff & Organ, 1986). Considering the fact that community members are asked for both their loyalty to the community and their loyalty to the brand, consistency in their answers suggests that members with a greater loyalty towards the community are also more loyal towards the sponsoring or operating brand, i.e. we assume that some consumers are more loyal than others.

Another line of argumentation for assuming a positive relationship between community loyalty and loyalty to the sponsor or operator of this community irrespective of

the consumer's awareness of the brand goes back to research on incidental exposure effects in marketing (Shapiro, 1999). For example, Herrmann, Walliser and Kacha (2010) have demonstrated sponsorship effects on spectators' consideration sets for consumers without brand-event linked recognition. This corroborates findings from advertising research which illustrate the conviction that incidental exposure influences the consideration sets even though the subjects did not recognize the ads to which they had been exposed (Shapiro, MacInnis, & Heckler, 1997) or a brand as an event sponsor (Herrmann, Walliser, & Kacha, 2011). In virtual environments, Acar (2007) demonstrates similar "mere exposure" effects (Zajonc, 1968) revealing that incidental exposure can be effective in online games.

Based on these theoretical and empirical considerations, the consistency motif and incidental exposure, we put forward the following hypothesis:

*H<sub>5</sub>: The greater the level of community members' loyalty towards the community, the greater their loyalty towards the brand that sponsors or operates the community.*

For a further examination of the relationship between the community and the sponsoring or operating brand, we focus on the awareness of the brand's investments into the community. In line with research on sponsoring (Grohs, Wagner, & Vsetecka, 2004) we assume that besides the above mentioned incidental effect the impact of a brand's support of the community primarily depends on the individual's awareness that the community is supported or operated by a brand. Only if community members are aware of the involvement of the brand, can their loyalty towards the sponsoring or operating brand be consciously affected. Drawing on research in co-branding and brand alliances, community research and the role of emotions in response to marketing stimuli, we see four lines of reasoning for this hypothesis.

First, in an abstract sense, the concept of branded communities resembles a brand

alliance. As in the case of brand alliances, the community and the brand owner jointly present themselves to the consumer over a longer period of time (Helmig, Huber, & Leeftang, 2008). Therefore, we assume potential image transfer processes for branded communities as they have been proven for brand alliances and the similar concept of co-branding (Wright, Frazer, & Merrilees, 2007). As a possible theoretical explanation, cognitive consistency has been used to explain how consumers reconcile their attitudes towards co-branded products. In particular, Heider's balance theory claims that people strive for balance, order and harmony in their lives (Heider, 1958). This means, fans of a brand will tend to like whatever is associated with their favorite brand and will tend to dislike whatever is associated with a brand they oppose (Dalakas & Levin, 2005). In the same way, members of branded communities are able to maintain consistency and internal harmony among their attitudes if they assimilate their attitudes towards the community and the sponsoring or operating brand.

Second, it is evident that community members have many experiences while participating in the community, which lead to positive (and sometimes negative) feelings. Given the fact that community members associate the online community with a certain brand as the sponsor or operator of the community, it is reasonable for them to attribute their feelings to the brand (McWilliam, 2000). Empirical studies have also found changes in attitudes towards the host of a community generated by participation in the community (Nambisan & Baron, 2007). Transferring these findings to our study, we assume an increase in loyalty towards a brand that is identified as the sponsor or operator of the community.

Third, community members' sense of moral responsibility also confirms the assumption that their loyalty towards the sponsoring brand increases (Muniz & O'Guinn, 2001). Accordingly, community members align their perceptions and behavior to support their community. One way to express this support and to maintain boundaries between their group and other groups is to favor products affiliated with their own group (i.e. products of

the supporting brand).

Fourth, theoretical and empirical research on the role of emotions in sport consumer behavioral and cognitive responses to marketing stimuli found that a positive emotional state enhances individual decision making processes (Kwak, Kim, & Hirt, 2011). For community members who generally visit the online community during their leisure time in order to have a good time, the findings suggest that these members reveal a favorable evaluation of a brand which is related to the community.

Based on these four lines of reasoning, we propose the following hypothesis:

*H6: Community members who are aware that the community is sponsored or operated by a specific brand are more loyal to this brand.*

However, members' knowledge of being part of a company-organized community theoretically decreases their loyalty to the community, since, according to social identity theory, they are less willing to act for a company's goals, and prefer to organize themselves. Company interference in the community might result in wariness amongst community members and restrain their creativity. These problems caused by managerial interventions particularly have been studied in brand community research (e.g., Beckmann, Gjerløff, & Denmark, 2007; Fournier & Lee, 2009; McWilliam, 2000). Empirical findings from that field provide numerous examples of communities with decreases in member participation due to a brand's efforts to control the community. Thus, the support of the brand owner may in fact be counterproductive and jeopardize the relationships between community members (Cova & Cova, 2002). Therefore, we propose the following hypothesis:

*H7: Community members who are aware that the community is sponsored or operated by a specific brand are less loyal to the community.*

## **4 Empirical Study**

### **4.1 Measures**

A standardized questionnaire with closed-response questions using 7-point Likert scales (1 = totally agree, 7 = totally disagree) was developed in order to ask members of the branded community about their attitudes towards football, the community and the organizer. We draw on existing scales wherever possible, however some scales had to be slightly adapted to better fit the context of the study. Most of the items were originally constructed in English and therefore had to be translated into German for the purpose of this study (Steenkamp, Hofstede, & Wedel, 1999). To verify the equivalence of this translation the research team translated the items back into English, resulting in minor language differences being quickly clarified. Similarly, scales originally developed in German were translated into English for the purpose of this publication.

Specifically, *topic identification* and *community identification* were measured by adapting an existing scale from community research (von Loewenfeld, 2006). The questions for measuring the respondents' *involvement with the topic* and their *involvement with the community* were derived from the consumer involvement profile (Kapferer & Laurent, 1993). There is no generally established scale for measuring the *quality of a community* yet. We decided to adapt the scale developed by von Loewenfeld (2006), which also considers previous research in that area (e.g., McAlexander et al., 2002) and provides a general measure for the quality or strength of a community. *Community loyalty* and *brand loyalty* integrate established items for measuring attitudinal loyalty such as loyalty intentions, brand preference and positive word-of-mouth (von Loewenfeld, 2006; Zeithaml, Berry, & Parasuraman, 1996). The dummy variable *awareness of support of the operating / sponsoring brand* is coded according to the community members' awareness of the brand's involvement in the community and splits the respondents into two groups (1 = member is aware of the support of the sponsoring or operating brand, 0 = member is not aware of the support of the sponsoring or operating brand). The complete list of items is provided in Appendix A.

## **4.2 Data collection and sample**

The theoretical considerations of branded communities were tested by means of an online survey conducted in a branded online community relating to football. An online survey was deemed appropriate as the sample comprises users of an online platform and respondents are very comfortable with online communication (Carlson et al., 2008).

The branded football community is operated by the leading German telecommunication corporation Deutsche Telekom. The company unobtrusively brands the community with its logo and the slogan “powered by”, so that community members may perceive the company’s involvement in the community, but are not necessarily aware of it. Furthermore, the German football association serves as a co-operation partner, providing the results of all of the German football leagues, and official information from the association. The community also offers a widespread range of features, e.g. sharing football videos and pictures, message boards, user blogs and mailing functions.

Our sample consists of 501 community members who responded to the online questionnaire. All respondents had to reply to all the items. At the end of the questionnaire, respondents were asked whether they are aware that the community is operated by the Deutsche Telekom. Of the total sample, 171 were aware that the community is operated by Deutsche Telekom, and 330 were not aware that the community is operated by Deutsche Telekom. Finally, 41.9 per cent of the respondents affirmed that they currently were customer of the Deutsche Telekom.

## **4.3 Data Analysis Methodology**

For this study, the Partial Least Squares Path Modeling (PLS-PM) (Chin, 1998) approach was used to estimate the relationships within the community and the effects for the operating brand. This approach has proved to be an effective alternative to covariance-based structural equation modeling (Chin & Newsted, 1999; Henseler, Ringle, & Sinkovics, 2009).

There are several reasons why PLS-PM was selected, constructs with three or less indicators which makes identification more complex using covariance-based methods (Bollen, 1989) and the study's primary focus on the model's overall predictive capacity or influence on the endogenous variables (Chin, 1998).

The higher-order latent variables (i.e. *topic interest*, and *community interest*) were set up through the repeated use of the manifest variables of the lower-order latent variables (Wetzels et al., 2009). Following the repeated indicators approach in PLS, which is also known as the hierarchical components model (Chin, Marcolin, & Newsted, 2003; Lohmöller, 1989). This approach assumes that the second order factor is directly measured by observed variables for all its first order factors (Venaik, 1999; Wilson, 2010).

The researchers used the software SmartPLS software (Ringle, Wende, & Will, 2005) to calculate the results of the study. As PLS is unable to consider blank cells in the data file, a method of accounting for missing data was required. The inspection of the data set revealed small numbers of missing values far below the suggested limits per case or per variable (Hair, Black, Babin, & Anderson, 2010). Consequently, the missing values were replaced with a mean value of the variable as is common practice (Hair et al., 2010).

#### **4.4 Results**

Table 1 summarizes the data distribution and the results of the reflective measurement model constructs. The evaluation of the measurement model was conducted using common quality criteria (Bagozzi & Yi, 2012; Chin, 2010; Fornell & Larcker, 1981). Internal consistency was evaluated with coefficient  $\alpha$  and its analogous measure composite reliability (CR). Furthermore, the average variance extracted (AVE) relates a construct's degree of variance, captured by its measures in relation to random measurement error. Estimates of  $\alpha$  above .70, CR above .70 and AVE above .50 are greater than the recommended levels (Chin, 2010) and therefore indicate good internal consistency .

**Table 1: Descriptive statistics and results of reflective measurement model constructs**

Construct	Mean	SD	Item loading range	Reliability and validity measures			Correlations among constructs <sup>a</sup>						
				$\rho_c$	$\alpha$	AVE	tid	tin	cid	cinv	cqual	cloy	bloy
Topic identification (tid)	1.88	.81	.65 → .86	.89	.86	.59	<i>.77<sup>a</sup></i>						
Topic involvement (tin)	1.37	.58	.77 → .87	.92	.89	.70	<i>.67</i>	<i>.84</i>					
Community identification (cid)	2.58	1.10	.67 → .90	.93	.91	.70	<i>.59</i>	<i>.39</i>	<i>.84</i>				
Community involvement (cinv)	2.03	.95	.81 → .85	.92	.89	.69	<i>.49</i>	<i>.52</i>	<i>.72</i>	<i>.83</i>			
Community quality (cqual)	3.27	1.09	.61 → .83	.96	.95	.57	<i>.35</i>	<i>.28</i>	<i>.55</i>	<i>.51</i>	<i>.75</i>		
Community loyalty (cloy)	1.88	.98	.76 → .87	.94	.93	.68	<i>.36</i>	<i>.30</i>	<i>.65</i>	<i>.65</i>	<i>.52</i>	<i>.82</i>	
Loyalty operating/ sponsoring brand (bloy)	3.19	1.31	.86 → .95	.98	.97	.83	<i>.18</i>	<i>.12</i>	<i>.30</i>	<i>.25</i>	<i>.31</i>	<i>.26</i>	<i>.91</i>

Notes: <sup>a</sup> Diagonal elements (in italics) show the square root of average variance extracted (AVE).

SD = standard deviation;  $\rho_c$  = composite reliability;  $\alpha$  = Cronbach's Alpha.

Convergent validity and discriminant validity was assessed following the advice of Chin (2010). First, we established that all items loaded significantly on their target construct and there are no excessive cross-loadings (see Appendix B). Second, the constructs met Fornell and Larcker's (1981) discriminant validity criterion as the average variance extracted by a construct is greater than the variance shared between the construct and other constructs (see Table 1). Third, all loadings and path coefficients between the first order and second order constructs were inspected (Wetzels et al., 2009). Parameter results and significance levels of the hierarchical measurement model are presented in Table 2. These were appropriate.

**Table 2: Hierarchical measurement model results**

Higher order construct name	Component name	Loading	t-Value	Significance
Topic interest				
$\rho_c = 0.926$	Topic identification	.919	17.751	**
AVE = 0.536	Topic involvement	.910	13.982	**
Community interest				
$\rho_c = 0.926$	Community identification	.941	91.284	**
AVE = 0.536	Community involvement	.912	75.988	**

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$ ;  $\rho_c$  = composite reliability; AVE = average variance extracted.

Having established the appropriateness of the measures, we discuss the empirical



results of our structural model which are provided in Figure 1. The significance of the path coefficients was derived using the PLS bootstrapping procedure (Chin, 2010).

Consistent with our hypothesis, interest in the topic (football) significantly influences interest in the community ( $\beta = .589$ ,  $t = 16.749$ ,  $p < .01$ ). However, contrary to our assumption, there is no significant direct effect of interest in the topic ( $\beta = -.072$ ,  $t = 1.486$ ,  $p > .05$ ) on community loyalty. This means that interest in a topic is a necessary, but not a sufficient condition to ensure community loyalty. According to the path coefficients, the members interest in the community is the most important determinant of community loyalty ( $\beta = .633$ ,  $t = 12.050$ ,  $p < .01$ ), but the quality of the relationships within the community represented by the construct community quality also significantly influences the members loyalty towards the community ( $\beta = .182$ ,  $t = 4.769$ ,  $p < .01$ ). Altogether, 5.8 % of community member loyalty to the branded community is explained. Considering the high level of competition and numerous alternatives in the area of sport-related social media, this ‘moderate’ R-square (Chin, 1998) for community loyalty indicates the great importance of the factors included in our model for the success of the branded community.

As hypothesized, the more loyal the community members are towards the community, the more loyal they are towards the target brand ( $\beta = .256$ ,  $t = 5.302$ ,  $p < .01$ ). Furthermore, the results revealed a significant positive influence of the perceived support of the operating or sponsoring brand on their loyalty to the brand ( $\beta = .250$ ,  $t = 5.944$ ,  $p < .01$ ). Hence, consumers appreciate the efforts of the brand and its support for the community, and they achieve harmony and balance by transferring their positive experiences from the community to their attitudes towards the brand.

Contrary to our assumption, members’ perceived support of the telecommunication provider had no significant influence on their loyalty towards the community ( $\beta = -.040$ ,  $t = 1.256$ ,  $p > .05$ ). The anticipated negative effects on the sense of community among the

members seem to be compensated for by the benefits of the community platform provided by the company. Overall, 12.8 % of the loyalty to the sponsoring brand is explained. Thus, applying Chin's (1998) assessment of PLS models, we revealed a rather weak explanation of the brand loyalty of community members. However, it is obvious that there are many exploratory variables influencing brand loyalty which are not included in our model (e.g. customer satisfaction with the operating or sponsoring brand), so that we consider the significant increase as a considerable contribution to brand loyalty. Thus, branded communities are an option to successfully strengthen brand relationship. Figure 2 summarizes up the main results of the model estimation.

## **5 Discussion**

### **5.1 Contributions**

The results of our quantitative study help to establish and to illuminate the phenomenon of branded communities. Therefore, we contribute to existing research which particularly focused on brand communities, but increasingly calls for alternative ways of brand engagement in varied communities (Wirtz et al., 2013).

First, our findings illustrate the central role of an individual's topic interest for getting interested in a community on that topic. It is a crucial determinant of interest in an online community which finally is paramount for a branded community's long-term success (i.e. community loyalty). These results help to explain failures of brand communities initiated by brands who are not able to raise an individual's interest in the brand in the long run.

Second, we demonstrate the value of the concept of branded communities for brands by proving positive consequences. In particular, the benefits of operating a branded community were revealed by a significant increase in loyalty towards the operating brand, if community members were aware of the support of this brand. Moreover, we show that irrespective of brand awareness members who are more loyal to the branded community are

also more loyal to the brand that operates it. Although this finding might substantiate mere exposure effects in the context of branded communities, we recognize that this result might also go back to the respondents' motif to maintain consistency between their answers to loyalty questions. Our study is therefore one of the first to demonstrate that it is possible to successfully operate a community of interest focused on a non-brand specific topic and thereby benefit from an increase in attitudinal loyalty towards the operating brand and positive WOM behavior. The common interest among the community members leads to user-generated content and a high frequency of use. The brand owner addresses consumers in a non-commercial surrounding and the consumers are highly involved in the platform. As a consequence, the group of community members who is aware of the support of the brand evaluates the brand's marketing activities favorably leading to the implication that brands should make sure that the support of the brand is visible to the community members. This claim is further substantiated by the fact that contrary to our hypothesis, consumers who were aware of the brand's role as the operator of the community did not reveal lower levels of loyalty towards the community.

Third, our findings contribute to research on motivation for interacting on the internet and social media (Stavros, Meng, Westberg, & Farrelly, 2013) as we show that primarily the content (i.e. the topic), but also the interaction among the users contribute to ongoing usage of an online platform.

Fourth, our research contributes to the integration of brand management and sponsoring in the still growing field of online interaction in social media. In particular, we were able to illustrate and empirically prove a way to deploy sponsorship in social media thereby filling the gap identified by Meenaghan, McLoughlin, and McCormack (2013). Branded communities extend extant research on sponsorship-linked marketing strategies particularly studied in sport management (Cornwall, 2008; Cornwell, Weeks, & Roy, 2005;

Fahy, Farrelly, & Quester, 2004). In this stream of literature, it is well known that the internet serves as a means for sponsors to activate sponsorships outside of the stadium by incorporating event-related information into corporate websites to engage event-interested consumers (Weeks, Cornwell, & Drennan, 2008). Moving beyond this, the present study demonstrates that in times of social media sport sponsorship even may solely consist of a sponsorship in the online environment. Hence, sport-related branded communities extend two of the most important forms of sponsorship to new media as the sponsoring or operating brand may either provide financial assistance (i.e. money) or in-kind assistance (i.e. technical infrastructure including hard- and software) to the online community (Cornwell et al., 2005).

Fifth, we demonstrate that branded communities are characterized by high degrees of interaction among community members who appreciate their mutual relationships and the engagement of a sponsoring brand. By highlighting these community-specific aspects, our research illustrates an alternative approach to other studies on sponsorships and social media which particularly focus on the volume of sponsor references (or other metrics) in social media or sentiment analysis (Meenaghan et al., 2013) or the role of social media for promoting sponsors in athletes' tweets (Hambrick & Mahoney, 2011; Hambrick, Simmons, Greenhalgh, & Greenwell, 2010). Our research therefore integrates sponsorship issues into the important field of user co-creation as members of communities for sport (Filo et al., 2014).

## **5.2 Implications**

### *5.2.1 Implications for companies*

Having shown the contribution of branded communities for brand management, the key challenge of marketing through branded online communities is to establish and maintain a successful online community. That is why our empirical study also analyzed the antecedents of individual loyalty towards the community. As the foundational basis of a community we identified the common interest in a topic (e.g. football), which is represented by a strong

identification and involvement with that topic, and as a result also with the associated community. We reveal that identification and involvement, both with a specific topic or issue and with the community are the main reasons why community members would be loyal. Consequently, any brand attempting to benefit from branded communities must first identify the strong common interest that unites the consumers. In branded communities, this link is not the brand itself, but something else and brand managers must identify a common interest which both is strong enough to facilitate enduring social interaction and also fits the brand concerned.

However, the concept of branded communities is open to any form of interest which conforms to the brand and offers viable attributes for image transfer. The common interest of the branded community may be strongly related to the brand concerned, but does not necessarily have to have a close link to that brand. For instance, Hoeffler and Keller (2002) suggest topics in the field of cause-related marketing and Dickinson and Barker (2006) emphasize the benefits of co-branding alliances between commercial entities and non-profit organizations. Moreover, companies subject to legal restrictions on advertising, such as the alcohol and tobacco industries, may initiate communities in fields linked to their products (Freeman & Chapman, 2009).

Besides the interest in a specific topic, we found that social interaction among members is a significant driver of a branded community's success. Therefore, brands that try to enhance their branded community must provide the members with tools for improving the quality of the community itself, i.e. the interaction and the personal relationships among the members. In this way, the concept of branded online communities introduced in our study enables companies to profit from the current growth of social media. Again, the sport context is a promising field for marketing activities, since 46% of Europeans visit sport sites (comScore, 2012). Thus operating or sponsoring online communities addresses consumers

precisely where they spend an important part of their leisure time. These consumers are highly involved and often interested in the co-creation of value by generating interesting website content, which in turn increases the visit frequency of members. Thus, a company can gain from integrating customers into the value creation process, which is often referred to as value co-creation (Payne, Storbacka, & Frow, 2008; Vargo & Lusch, 2006). This complements research in the area, in which the contribution of customer involvement in value creation was demonstrated in new product / service development (e.g., Fang, Palmatier, & Evans, 2008) and creating customer experiences (e.g., Payne et al., 2008).

As a result, marketers should increasingly integrate communities into their branding strategy. Community aspects enable relationships between the users and thus yield added value in comparison with a branded online website without community functions. Our study demonstrates potential advantages by showing a positive influence of community quality on website loyalty. The social benefits added to the website hence supplement the functional benefits provided by the website operator.

### *5.2.2 Implications for online communities*

Furthermore, our research illustrates the advantages for the community operators. In particular, in the absence of viable revenue models for many online platforms, a branded community may be a win-win-situation for both the brand and the community operator. Indeed, numerous online communities face the dilemma of having a great number of members, however most of these members display a low willingness to pay for access to the community. Pursuing the strategy of a branded community may be an alternative for such communities. In comparison to “regular” advertising in online communities, the public partnership of two independent brands extends beyond a mere exchange of money for online advertising, but rather offers widespread mutual benefits for both parties. Primarily, these could take the form of a strategically desirable exchange of image attributes and “meaning”,

but the benefits could also lie in the transfer of technology and knowledge between partners.

In addition to these considerations, other empirical studies reveal that a strong brand increases website usage (Thorbjornsen & Supphellen, 2004). Thus, marketers should also try to build a strong community brand which then contributes to the success of branded communities.

### *5.2.3 Implications for sport management*

For sport management, our findings indicate that any object linked to a strong interest such as football (e.g. club, association, sports website) have the power to advance sport sponsorship to the internet. Although the present empirical study is based on one single branded community it seems reasonable that similar results although apply to other ‘big’ sports and sponsorships from other companies interested in establishing a branded community in the sport context. Sport is a perfect example of a strong common interest for creating and maintaining successful branded communities. Sport fans are highly involved, sport offers social components and for many fans, sport plays an important role in their everyday lives (Sutton et al., 1997). In addition, previous literature has emphasized that consumer attitudes towards advertising through sport are significantly higher than towards advertising in general (Pyun, Kwon, Chon, & Han, 2012). Consequently, sport and all actors from that context offer valuable access to a great number of highly engaged potential customers which gives sponsors the venue to involve them with the brand over a longer period of time (Nickell, Cornwell, & Johnston, 2011). Managers acting in the field of sport should recognize this in order to generate financial or non-monetary benefits from companies whose brands serve as a weak basis for enduring customer interaction.

## **6 Limitations and Further Research**

Despite the evidence for the use of branded communities in brand management, there are several issues that still require examination in more detail. First, our empirical study is based on the example of one branded community which is operated by a company. Although

the line between operating and sponsoring often is blurred in the perception of community members, further research should verify whether our findings also apply to branded communities strategically sponsored by a company. Second, the possibility of negative effects of branded communities has to be addressed. Although this was not tested in our study, theoretical assumptions suggest that the prominence of the brand should be clear enough for community participants to be aware of the brand, but not too aggressive. For instance, too much control by the operating or sponsoring brand could deter potential community members from joining the community or constrain the activities of current members, even leading to negative word-of-mouth. As a third shortcoming, the present study merely shows the advantages of branded communities with respect to the loyalty towards the operating brand. However, further research is needed to study the image transfer process in greater detail. Therefore, a comprehensive conceptualization of sponsor brand image – and the image associated with the specific interest on which that branded community is based – is important in order to monitor the fit between community and brand. Fourth, from a practical perspective, the use of branded communities should be compared with other marketing strategies. In doing this, the costs of brand engagement in a community must be included, thus facilitating a detailed cost-benefit analysis. Finally, our study focuses on a community which is related to sport and reveals the excellent suitability of the sport context for branded communities. Further studies on other communities which share significantly different interests should help to generalize our findings.

## **7 References**

Acar, A. (2007). Testing the effects of incidental advertising exposure in online gaming environments. *Journal of Interactive Advertising*, 8(1), 45-56.



- Algesheimer, R., Borle, S., Dholakia, U. M., & Singh, S. S. (2010). The Impact of Customer Community Participation on Customer Behaviors: An Empirical Investigation. *Marketing Science*, 29(4), 756-769.
- Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The Social Influence of Brand Community: Evidence from European Car Clubs. *Journal of Marketing*, 69(3), 19-34.
- Andersen, P. H. (2005). Relationship marketing and brand involvement of professionals through web-enhanced brand communities: the case of Coloplast. *Industrial Marketing Management*, 34(3), 285-297.
- Ant's Eye View. (2008). Ant's Eye View Timeline: Sean McDonald oversees Dell Community Forum growth to 1.4 million registered users Retrieved 2013-08-23, from <https://www.facebook.com/AntsEyeView>
- Bagozzi, R. P., & Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. *International Journal of Research in Marketing*, 23(1), 45-61.
- Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science*, 40(1), 8-34.
- Beckmann, S. C., Gjerløff, M., & Denmark, D. D. B. N. (2007). *A framework for communicating with brand communities*. Paper presented at the Proceedings of 10th Australian and New Zealand Marketing Academy Conference.
- Berger, J., & Schwartz, E. M. (2011). What Drives Immediate and Ongoing Word of Mouth? *Journal of Marketing Research*, 48(5), 869-88.
- Carlson, B. D., Suter, T. A., & Brown, T. J. (2008). Social versus psychological brand community: The role of psychological sense of brand community. *Journal of Business Research*, 61(4), 284-291.

- Casaló, L. V., Flavián, C., & Guinalú, M. (2007). The impact of participation in virtual brand communities on consumer trust and loyalty: The case of free software. *Online Information Review*, 31(6), 775-792.
- Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah: Lawrence Erlbaum.
- Chin, W. W. (2010). How to Write Up and Report PLS Analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications in Marketing and Related Fields* (pp. 655-690). Berlin: Springer.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion / adoption study. *Information Systems Research*, 14(2), 189-217.
- Chin, W. W., & Newsted, P. R. (1999). Structural Equation Modeling analysis with Small Samples Using Partial Least Squares. In R. H. Holte (Ed.), *Statistical Strategies for Small Sample Research* (pp. 307-341). Thousand Oaks: Sage.
- comScore, I. (2012). Nearly Half of European Online Audience Visit Sports Sites Retrieved 09/25/2012, 2012, from [http://www.comscore.com/ger/Press\\_Events/Press\\_Releases/2012/4/Nearly\\_Half\\_of\\_European\\_Online\\_Audience\\_Visit\\_Sports\\_Sites](http://www.comscore.com/ger/Press_Events/Press_Releases/2012/4/Nearly_Half_of_European_Online_Audience_Visit_Sports_Sites)
- Cornwall, T. B. (2008). State of art and science in sponsorship-linked marketing. *Journal of Advertising*, 37(3), 41-55.
- Cornwell, T. B., Weeks, C. S., & Roy, D. P. (2005). Sponsorship-linked marketing: opening the black box. *Journal of Advertising*, 34(2), 21-42.

- Cova, B., & Cova, V. (2002). Tribal marketing: The tribalisation of society and its impact on the conduct of marketing. *European Journal of Marketing*, 36(5/6), 595-62.
- Cova, B., & Pace, S. (2006). Brand community of convenience products: new forms of customer empowerment – the case "my Nutella The Community". *European Journal of Marketing*, 40(9/10), 1087-1105.
- Davidson, L., McNeill, L., & Ferguson, S. (2007). Magazine communities: brand community formation in magazine consumption. *International journal of sociology and social policy*, 27(5/6), 208-22.
- Delgado-Ballester, E., & Hernández-Espallardo, M. (2008). Building online brands through brand alliances in internet. *European Journal of Marketing*, 42(9/10), 954-976.
- Dickinson, S., & Barker, A. (2006). Evaluations of branding alliances between non-profit and commercial brand partners: the transfer of affect. *International Journal of Nonprofit and Voluntary Sector Marketing*, 12(1), 75-89.
- Dignum, V., & Eden, P. (2005). Seducing, Engaging and Supporting Communities at Achmea. In W. Baets (Ed.), *Knowledge Management and Management Learning: Extending the Horizons of Knowledge-Based Management* (Vol. 9, pp. 125-141). Berlin: Springer.
- Ellemers, N., Kortekaas, P., & Ouwerkerk, J. (1999). Self-categorization, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology*, 29, 371-389.
- Fahy, J., Farrelly, F., & Quester, P. (2004). Competitive advantage through sponsorship: A conceptual model and research propositions. *European journal of Marketing*, 38(8), 1013-103.

- Fang, E., Palmatier, R., & Evans, K. (2008). Influence of customer participation on creating and sharing of new product value. *Journal of the Academy of Marketing Science*, 36(3), 322-336.
- Filo, K., Lock, D., & Karg, A. (2014). Sport and social media research: A review. *Sport Management Review*(0).
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-5.
- Fournier, S., & Lee, L. (2009). Getting brand communities right. *Harvard Business Review*, 87(4), 105-111.
- Freeman, B., & Chapman, S. (2009). Open source marketing: Camel cigarette brand marketing in the "Web 2.0" world. *Tob Control*, 18(3), 212-217.
- Füller, J., Matzler, K., & Hoppe, M. (2008). Brand Community Members as a Source of Innovation. *Journal of Product Innovation Management*, 25(6), 608-619.
- Gribbins, M., Lauf, R., Subramaniam, C., & Shaw, M. J. (2002). Focus on Consumers: P&G's e-Commerce Strategy. In M. J. Shaw (Ed.), *E-Business Management: Integration of Web Technologies with Business Models* (pp. 109-131). New York: Springer.
- Grohs, R., Wagner, U., & Vsetecka, S. (2004). Assessing the effectiveness of sport sponsorships—an empirical examination. *Schmalenbach Business Review*, 56(2), 119-138.
- Hagel, J., & Armstrong, A. G. (1997). *Net gain: expanding markets through virtual communities*. Boston, Mass.: Harvard Business School Press.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7 ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

- Hambrick, M. E., & 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*, 10(3), 161-179.
- Hambrick, M. E., Simmons, J. M., Greenhalgh, G. P., & Greenwell, T. C. (2010). Understanding professional athletes' use of Twitter: A content analysis of athlete tweets. *International Journal of Sport Communication*, 3(4), 454-471.
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: John Wiley & Sons.
- Helmig, B., Huber, J.-A., & Leeflang, P. S. H. (2008). Co-Branding: The State of the Art. *Schmalenbach Business Review (SBR)*, 60(4), 359-377.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*(20), 277-319.
- Herrmann, J.-L., Walliser, B., & Kacha, M. (2010). Sport Sponsorship Effects on Spectators' Consideration Sets: Impact With and Without Brand-Event Link Recognition. In M. C. Campbell, J. Inman & R. Pieters (Eds.), *Advances in Consumer Research, Volume 37* (pp. 550-552). Duluth, MN: Association for Consumer Research,.
- Herrmann, J.-L., Walliser, B., & Kacha, M. (2011). Consumer consideration of sponsor brands they do not remember: taking a wider look at the memorisation effects of sponsorship. *International Journal of Advertising*, 30(2), 259-281.
- Hoeffler, S., & Keller, K. L. (2002). Building Brand Equity Through Corporate Societal Marketing. *Journal of Public Policy and Marketing*, 21(1), 78-89.
- Holland, J., & Baker, S. M. (2001). Customer participation in creating site brand loyalty. *Journal of Interactive Marketing*, 15(4), 34-45.

- Hutton, G., & Fosdick, M. (2011). The Globalization of Social Media: Consumer Relationships with Brands Evolve in the Digital Space. *Journal of Advertising Research, 51*(4), 564-57.
- Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management, 23*(3), 344-361.
- Javalgi, R. G., Traylor, M. B., Gross, A. C., & Lampman, E. (1994). Awareness of Sponsorship and Corporate Image: An Empirical Investigation. *Journal of Advertising, 23*(4), 47-58.
- Johns, G. (1994). How often were you absent? A review of the use of self-reported absence data. *Journal of Applied Psychology, 79*(4), 574-591.
- Kapferer, J. N., & Laurent, G. (1993). Further evidence on the consumer involvement profile: five antecedents of involvement. *Psychology and Marketing, 10*(4), 347-355.
- Kozinets, R. V. (2002). The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research, 39*(1), 61-72.
- Kwak, D. H., Kim, Y. K., & Hirt, E. R. (2011). Exploring the Role of Emotions on Sport Consumers' Behavioral and Cognitive Responses to Marketing Stimuli. *European Sport Management Quarterly, 11*(3), 225-25.
- Laroche, M., Habibi, M. R., & Richard, M.-O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management, 33*(1), 76-82.
- Lesser, E. L., & Storck, J. (2001). Communities of practice and organizational performance. *IBM Systems Journal, 40*(4), 831-841.
- Lohmöller, J.-B. (1989). *Latent variable path modeling with partial least squares*. Heidelberg: Physica-Verlag.

- Luedicke, M. K. (2006). Brand Community Under Fire: The Role of Social Environments for the HUMMER Brand Community. *Advances in Consumer Research*, 33, 486-493.
- Mathwick, C., Wiertz, C., & de Ruyter, K. (2008). Social Capital Production in a Virtual P3 Community. *Journal of Consumer Research*, 34(6), 832-849.
- McAlexander, J. H., Schouten, J. W., & Koenig, H. F. (2002). Building Brand Community. *Journal of Marketing*, 66(1), 38-54.
- McWilliam, G. (2000). Building Stronger Brands through Online Communities. *Sloan Management Review*, 41(3), 43-54.
- Meenaghan, T., McLoughlin, D., & McCormack, A. (2013). New Challenges in Sponsorship Evaluation Actors, New Media, and the Context of Praxis. *Psychology & Marketing*, 30(5), 444-46.
- Molesworth, M. (2006). Real brands in imaginary worlds: investigating players' experiences of brand placement in digital games. *Journal of Consumer Behaviour*, 5(4), 355-366.
- Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research*, 27(4), 412-432.
- Muniz, A. M., & Schau, H. J. (2005). Religiosity in the Abandoned Apple Newton Brand Community. *Journal of Consumer Research*, 31(4), 737-747.
- Nambisan, S., & Baron, R. A. (2007). Interactions in virtual customer environments: Implications for product support and customer relationship management. *Journal of Interactive Marketing*, 21(2), 42-62.
- Nickell, D., Cornwell, T. B., & Johnston, W. J. (2011). Sponsorship-linked marketing: a set of research propositions. *Journal of Business & Industrial Marketing*, 26(8), 577-589.
- O'Guinn, T. C., & Muniz, A. M. (2005). Communal Consumption and the Brand. In D. G. Mick & S. Ratneshwar (Eds.), *Inside Consumption: Perspectives on Consumer Motives, Goals and Desires* (pp. 252-272). London: Routledge.

- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue 1999), 33-44.
- Palmatier, R. W., Scheer, L. K., & Steenkamp, J.-B. E. M. (2007). Customer Loyalty to Whom? Managing the Benefits and Risks of Salesperson-Owned Loyalty. *Journal of Marketing Research*, 44(2), 185-199.
- Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83-96.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544.
- Pongsakornrunsilp, S., & Schroeder, J. E. (2011). Understanding value co-creation in a co-consuming brand community. *Marketing Theory*, 11(3), 303-324.
- Pyun, D. Y., Kwon, H. H., Chon, T. J., & Han, J. W. (2012). How does advertising through sport work? Evidence from college students in Singapore. *European Sport Management Quarterly*, 12(1), 43-63.
- Quester, P., & Lim, A. L. (2003). Product involvement/brand loyalty: Is there a link? *The Journal of Product and Brand Management*, 12(1), 22.
- Raney, A. A., Arpan, L. M., Pashupati, K., & Brill, D. A. (2003). At the movies, on the Web: An investigation of the effects of entertaining and interactive Web content on site and brand evaluations. *Journal of Interactive Marketing*, 17(4), 38-53.
- Ringle, C. M., Wende, S., & Will, A. (2005). SmartPLS 2.0 M3 Beta. Hamburg: SmartPLS. Retrieved from <http://www.smartpls.de>
- Rosenbaum, M. S. (2008). Return on Community for Consumers and Service Establishments. *Journal of Service Research*, 11(2), 179-196.
- Rothschild, M. L. (1984). Perspectives on involvement: current problems and future directions. *Advances in Consumer Research*, 11(1), 216-217.



- Santomier, J. (2008). New media, branding and global sports sponsorship. *International Journal of Sports Marketing & Sponsorship*, 10(1), 15-28.
- Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20(2), 153-175.
- Shapiro, S. (1999). When an ad's influence is beyond our conscious control: Perceptual and conceptual fluency effects caused by incidental ad exposure. *Journal of Consumer Research*, 26(1), 16-36.
- Shapiro, S., MacInnis, D. J., & Heckler, S. E. (1997). The effects of incidental ad exposure on the formation of consideration sets. *Journal of Consumer Research*, 24(1), 94-104.
- Stavros, C., Meng, M. D., Westberg, K., & Farrelly, F. (2013). Understanding fan motivation for interacting on social media. *Sport management review*(0).
- Steenkamp, J.-B. E. M., Hofstede, F. t., & Wedel, M. (1999). A Cross-National Investigation into the Individual and National Cultural Antecedents of Consumer Innovativeness. *Journal of Marketing*, 63(2), 55-69.
- Stokburger-Sauer, N. (2010). Brand community: Drivers and outcomes. *Psychology and Marketing*, 27(4), 347-368.
- Sutton, W. A., McDonald, M. A., Milne, G. R., & Cimperman, J. (1997). Creating and Fostering Fan Identification in Professional Sports. *Sport Marketing Quarterly*, 6(1), 15-22.
- Tajfel, H. (1982). Social Psychology of Intergroup Relations. *Annual Reviews in Psychology*, 33(1), 1-39.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole Pub. Co.

- Thorbjornsen, H., & Supphellen, M. (2004). The impact of brand loyalty on website usage. *Journal of Brand Management*, 11(3), 199-208.
- Vargo, S. L., & Lusch, R. F. (2006). Service-Dominant Logic: What it is, What it is not, What it might be. In R. F. Lusch & S. L. Vargo (Eds.), *The service-dominant logic of marketing: Dialog, debate, and directions* (pp. 43-56). Armonk, NY: ME Sharpe Inc.
- Venaik, S. (1999). *A Model of Global Marketing in Multinational Firms: An Empirical Investigation*. Doctor of Philosophy Unpublished Dissertation, A School of both The University of Sydney and The University of New South Wales, Sidney.
- von Loewenfeld, F. (2006). *Brand Communities – Erfolgsfaktoren und ökonomische Relevanz von Markengemeinschaften*. Wiesbaden: Deutscher Universitäts-Verlag.
- Weeks, C. S., Cornwell, T. B., & Drennan, J. C. (2008). Leveraging sponsorships on the Internet: Activation, congruence, and articulation. *Psychology & Marketing*, 25(7), 637-654.
- West, J., & Lakhani, K. R. (2008). Getting Clear About Communities in Open Innovation. *Industry & Innovation*, 15(2), 223 - 231.
- Wetzels, M., Odekerken-Schröder, G., & van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: guidelines and empirical illustration. *Management Information Systems Quarterly*, 33(1), 177-195.
- Wieseke, J., Ahearne, M., Lam, S. K., & van Dick, R. (2009). The Role of Leaders in Internal Marketing. *Journal of Marketing*, 73(2), 123-145.
- Wilson, B. (2010). Using PLS to Investigate Interaction Effects Between Higher Order Branding Constructs. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications in Marketing and Related Fields* (pp. 621-652). Berlin/Heidelberg: Springer.

- Wirtz, J., Den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., Van De Klundert, J., et al. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, 24(3), 223-244.
- Woisetschlager, D. M., Hartleb, V., & Blut, M. (2008). How to Make Brand Communities Work: Antecedents and Consequences of Consumer Participation. *Journal of Relationship Marketing*, 7(3), 237-256.
- Won, J. S., Green, C. B., Yong, J. K., Seunghwan, L., & Schenewark, J. (2007). The effect of web cohesion, web commitment, and attitude toward the website on intentions to use NFL teams' websites. *Sport management review*, 10(3), 231-252.
- Woolf, J., Heere, B., & Walker, M. (2013). Do Charity Sport Events Function as "Brandfests" in the Development of Brand Community? *Journal of Sport Management*, 27(2), 95-107.
- Wright, O., Frazer, L., & Merrilees, B. (2007). McCafe: The McDonald's co-branding experience. *Journal of Brand Management*, 14(6), 442.
- Zaglia, M. E. (2013). Brand communities embedded in social networks. *Journal of Business Research*, 66(2), 216-223.
- Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12(3), 341-352.
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, 9(2p2), 1.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.

## Appendix A: Measures

Label	Item
<b>Topic Identification</b> ( <i>von Loewenfeld, 2006</i> )	
tid_1	There are similarities between me and what football represents.
tid_2	The image of football conforms well to my self-perception.
tid_3	Football suits me.
tid_4	My interest in football is bigger than my interest in any other sport.
tid_5	I consider football to be attractive.
tid_6	I am able to identify myself with football.
<b>Topic Involvement</b> ( <i>derived from Kapferer &amp; Laurent, 1993</i> )	
tin_v_1	I am very interested in football.
tin_v_2	I am always interested in news about football.
tin_v_3	I like being involved in football.
tin_v_4	I like to talk about football with other people.
tin_v_5	I am interested in other peoples' thoughts and stories about football.
<b>Community Identification</b> ( <i>von Loewenfeld, 2006</i> )	
cid_1	There are similarities between me and what "fussball.de" represents.
cid_2	The image of "fussball.de" conforms well to my self-perception.
cid_3	"fussball.de" suits me.
cid_4	I am more interested in "fussball.de" than any other online offers about football.
cid_5	I consider "fussball.de" to be attractive..
cid_6	I am able to identify myself with "fussball.de"
<b>Community Involvement</b> ( <i>derived from Kapferer &amp; Laurent, 1993</i> )	
cinv_1	I am very interested in "fussball.de".
cinv_2	I am always interested in news concerning "fussball.de".
cinv_3	I like being involved in "fussball.de".
cinv_4	I like to talk about "fussball.de" with other people.
cinv_5	I am interested in other peoples' thoughts and stories about "fussball.de"
<b>Community Quality</b> ( <i>von Loewenfeld, 2006</i> )	
cqual_1	I have many opportunities to contact other community members.
cqual_2	It is easy for me to contact other community members.
cqual_3	I like being in close contact with other community members.
cqual_4	The interaction with other community members is very important to me.
cqual_5	I use the opportunity to contact other community members.
cqual_6	I like to have conversations with other community members about "fussball.de".
cqual_7	I like to help other community members as much as I can.
cqual_8	Other community members are a bit like friends to me.
cqual_9	Community members help one another.
cqual_10	If I am looking for advices concerning football, I am always able to find someone within the community to help me.
cqual_11	I made new friends by joining the community.
cqual_12	Friendships within the community are important to me.
cqual_13	It was a good decision to join the community.
cqual_14	The community entirely fulfills my expectations.
cqual_15	Community issues match my interests.
cqual_16	My needs are satisfied by the community.
cqual_17	I can participate actively in the community.
cqual_18	As community member I am definitely able to play a part in the community.
<b>Community Loyalty</b> ( <i>von Loewenfeld, 2006; Zeithaml et al., 1996</i> )	
cloy_1	I am likely to remain loyal to "fussball.de".
cloy_2	I consider myself loyal to "fussball.de".
cloy_3	"fussball.de" is my favorite football homepage and will remain so.
cloy_4	In general, I speak positively about "fussball.de" in a positive way.
cloy_5	If someone asks me for advice about a football community, I suggest "fussball.de".
cloy_6	I encourage friends and accordingly relatives to use "fussball.de".
cloy_7	I can recommend "fussball.de" without hesitation.
cloy_8	I enjoy encouraging people to use "fussball.de".
<b>Loyalty Operating/Sponsoring Brand</b> ( <i>von Loewenfeld, 2006; von Loewenfeld, 2006; Zeithaml et al., 1996</i> )	
bloy_1	I will almost certainly remain loyal to the Deutsche Telekom brand.
bloy_2	I would consider myself as loyal to the Deutsche Telekom brand.
bloy_3	Deutsche Telekom is my favorite telecommunication brand and will remain so.
bloy_4	In general, I speak positively about Deutsche Telekom.
bloy_5	If someone asks me for advice about a telecommunication brand, I suggest Deutsche Telekom.
bloy_6	I encourage friends and relatives to use the services and products of Deutsche Telekom.
bloy_7	I can recommend Deutsche Telekom without hesitation.
bloy_8	I enjoy encouraging people to use Deutsche Telekom.
<b>Awareness of Support of Operating/Sponsoring Brand –</b>	
aware	Did you know that "fussball.de" is provided by Deutsche Telekom?

Note. All items except 'aware' measured on a seven-point scale ranging from 'totally agree' to 'totally disagree'. Item 'aware' is measured by dichotomous variable: ('yes' or 'no').

## Appendix B: Outer model loadings and cross loadings for the measurement model

Item	Football identification (tid)	Topic involvement (tiv)	Community identification (cid)	Community involvement (cinv)	Community quality (cqual)	Community loyalty (cloy)	Loyalty operating/ sponsoring brand (bloy)	Awareness of operating/ sponsoring brand (aware)
tid_1	<b>.79</b>	.46	.53	.38	.33	.31	.13	.05
tid_2	<b>.83</b>	.48	.56	.41	.32	.33	.17	.05
tid_3	<b>.86</b>	.60	.44	.38	.30	.31	.14	.04
tid_4	<b>.65</b>	.47	.30	.27	.19	.22	.08	-.02
tid_5	<b>.65</b>	.45	.43	.38	.23	.23	.18	.00
tid_6	<b>.80</b>	.60	.42	.42	.22	.27	.13	-.04
tinvs_1	.57	<b>.84</b>	.25	.34	.19	.20	.08	-.08
tinvs_2	.53	<b>.85</b>	.32	.49	.20	.26	.10	-.08
tinvs_3	.57	<b>.87</b>	.28	.40	.17	.25	.06	-.10
tinvs_4	.62	<b>.85</b>	.39	.47	.30	.28	.14	-.02
tinvs_5	.52	<b>.76</b>	.40	.51	.31	.28	.14	.03
cid_1	.56	.35	<b>.88</b>	.63	.48	.54	.25	.06
cid_2	.53	.33	<b>.90</b>	.61	.51	.52	.28	.06
cid_3	.58	.38	<b>.90</b>	.68	.50	.57	.27	.03
cid_4	.35	.23	<b>.67</b>	.49	.39	.55	.23	.02
cid_5	.41	.33	<b>.79</b>	.58	.43	.53	.27	.03
cid_6	.49	.32	<b>.87</b>	.62	.46	.56	.24	.03
cinv_1	.40	.49	.57	<b>.82</b>	.40	.59	.18	-.01
cinv_2	.37	.50	.52	<b>.84</b>	.37	.51	.20	-.03
cinv_3	.43	.49	.56	<b>.85</b>	.34	.53	.20	-.04
cinv_4	.42	.35	.68	<b>.84</b>	.51	.52	.24	.04
cinv_5	.41	.37	.65	<b>.81</b>	.51	.50	.24	.09
cqual_1	.16	.13	.30	.31	<b>.61</b>	.25	.20	.06
cqual_2	.24	.20	.36	.35	<b>.67</b>	.29	.23	.08
cqual_3	.23	.20	.47	.46	<b>.76</b>	.38	.24	.11
cqual_4	.25	.19	.47	.45	<b>.78</b>	.40	.26	.10
cqual_5	.24	.19	.47	.45	<b>.78</b>	.38	.27	.17
cqual_6	.28	.24	.49	.48	<b>.80</b>	.41	.30	.12
cqual_7	.23	.20	.29	.33	<b>.70</b>	.33	.22	.10
cqual_8	.30	.22	.45	.42	<b>.77</b>	.42	.24	.08
cqual_9	.27	.21	.35	.31	<b>.78</b>	.37	.23	.09
cqual_10	.24	.15	.39	.31	<b>.77</b>	.38	.23	.08
cqual_11	.25	.19	.43	.41	<b>.79</b>	.38	.27	.15
cqual_12	.26	.24	.42	.42	<b>.78</b>	.36	.23	.09
cqual_13	.28	.24	.45	.44	<b>.78</b>	.49	.22	.06
cqual_14	.27	.24	.44	.40	<b>.79</b>	.46	.24	.09
cqual_15	.34	.31	.49	.43	<b>.82</b>	.47	.21	.05
cqual_16	.32	.26	.50	.42	<b>.83</b>	.48	.25	.06
cqual_17	.21	.16	.33	.27	<b>.64</b>	.33	.17	.11
cqual_18	.25	.17	.32	.24	<b>.66</b>	.33	.16	.08
cloy_1	.29	.33	.47	.52	.39	<b>.77</b>	.17	-.06
cloy_2	.30	.24	.48	.48	.39	<b>.76</b>	.19	.01
cloy_3	.26	.21	.56	.53	.40	<b>.83</b>	.23	-.01
cloy_4	.32	.25	.53	.55	.45	<b>.86</b>	.21	-.01
cloy_5	.27	.20	.54	.51	.44	<b>.87</b>	.24	.01
cloy_6	.31	.23	.54	.54	.43	<b>.85</b>	.19	.05
cloy_7	.32	.25	.51	.48	.41	<b>.82</b>	.21	-.01
cloy_8	.34	.28	.62	.58	.49	<b>.84</b>	.25	.06
bloy_1	.15	.14	.20	.19	.20	.20	<b>.85</b>	.16
bloy_2	.17	.16	.26	.22	.25	.24	<b>.88</b>	.18
bloy_3	.16	.15	.24	.21	.23	.22	<b>.91</b>	.20
bloy_4	.17	.09	.29	.23	.29	.26	<b>.93</b>	.26
bloy_5	.17	.10	.27	.23	.30	.21	<b>.95</b>	.25
bloy_6	.18	.10	.29	.25	.30	.23	<b>.94</b>	.25
bloy_7	.14	.09	.29	.24	.31	.22	<b>.93</b>	.23
bloy_8	.19	.09	.35	.27	.35	.27	<b>.91</b>	.27
aware	.02	-.06	.05	.02	.12	.01	.25	<b>1.00</b>