Abstract

Fan satisfaction is with services is a key element to successfully compete in the soccer industry. In this paper we examine the antecedent factors that explain the variations in overall service satisfaction judgements. We draw on service an activities put in place by soccer clubs to illustrate these effects. Based on a literature review, interviews with both soccer fans and an industry expert, we develop a measurement approach for satisfaction which we test subsequently using a large-scale sample among soccer fans. An analysis of the impact-performance implications of antecedent drivers shows that stadium features, team characteristics, and fan-based support for the club and its management are the most important factors that influence overall satisfaction.

Keywords: customer service, satisfaction, service experience, service providers
Satisfaction with Services: An Impact-Performance Analysis for Soccer-Fan Satisfaction Judgements

Literature review on the relevance of fan satisfaction for soccer clubs

Soccer is a multibillion dollar business that represents a vital and weighty factor in national, regional and local economies. With the growth of the sports business sector’s importance over the last few years, the professionalisation of soccer clubs’ structure and management has increased correspondingly. As a result, the terms of business in this industry have completely changed; with professional soccer clubs turning into corporate businesses (Desbores, 2007). Economic aspects have a greater-than-ever influence on soccer club activities, and lucrative business opportunities have emerged, for example, for sports marketers (Buhler, Heffernan and Hewson, 2007; Mason, 1999). Hence, the competition between soccer clubs is no longer restricted to the sports field but extends to the economic domain. Moreover, this industry also faces competition from other types of sport and entertainment (Höck, Ringle and Sarstedt, 2009).

Soccer clubs must pay increasing attention to the range of services they can offer with regard to the best business development opportunities (Theodorakis, Kambitsis and Laios, 2001) and it is not surprising that customer orientation and fan satisfaction play a decisive role in this competition (Laverie and Arnett, 2000; Madigral, 1995). It is of utmost importance that soccer companies satisfy existing customers, retain these customers, and gain new ones in order to generate strategic competitive advantages (Gwinner and Swanson, 2003; Rust and Zahorik, 1993; Trail, Anderson and Fink, 2005). Likewise, fan satisfaction is of high importance for soccer stadiums (Greenwell, Fink and Pastore, 2006). Specifically, customers’ evaluations of service quality influence emotional satisfaction assessments and, in turn, specific behaviours such as customer loyalty (Fornell et al., 1996), customer retention (Garbarino and Johnson, 1999), willingness to pay (Homburg, Koschate and Hoyer, 2005) and price tolerance (Anderson, 1996). Management’s primary interest should therefore be to increase attendees’ satisfaction by improving the perceived service value (Gudergan and Ellis, 2007) so that fans are willing to attend events regularly and recommend the stadium to other, potentially new, visitors.

The aim of this paper is to develop and validate an instrument for measuring fan satisfaction based on a comprehensive review of literature, expert and focus group interviews as well as a large-scale empirical study of fans from a major German soccer club. The analysis results reveal information on the general satisfaction, satisfaction regarding certain aspects, and indicators’ influence on the fans’ overall satisfaction.

The remainder of this paper proceeds as follows: After a brief discussion of the index construction procedure, we present the results of the empirical study. Subsequently, we introduce a more detailed analysis using impact-performance maps. The paper concludes with a discussion of results, limitations and future research directions.

Development of an instrument for measuring fan satisfaction

Despite its apparent significance, only limited research has examined the determinants of fan satisfaction in an integrative framework (Leeuwen, Quick and Daniel, 2002). Instead, most studies focus on specific component’s influence on fan satisfaction and behaviour. For example, past research has investigated the role of the sportscape (Wakefield, Blodgett and Sloan, 1996; Wakefield and Sloan, 1995; Hill and Green, 2000; Greenwell, Fink and Pastore, 2006), team success (Baade and Tiehen, 1990; Pan et al., 1997) or pre-event activities (Zhang et al., 1998). Exceptions in this context are the studies by Madrigal (1995), Wakefield and Blodgett (1994) as well as Kennett, Sneath and Henson (2001) who helped to develop a broader understanding of those factors that drive the satisfaction of sport fans. Yet, there is great scope for additional investigations into fan satisfaction determinants, since these studies exclude important service components such as fan-based support and disregard the epistemic nature of the fan satisfaction construct which is
routinely operationalized in a reflective set-up. Different from this, this research follows the approach by Höck, Ringle and Sarstedt (2009) which uses a path modelling approach with formative latent variables (e.g., Gudergan et al. 2008) to empirically determine the effect of a multitude of antecedent factors on fan satisfaction. The index construction procedure (Diamantopoulos and Winklhofer, 2001) of the fan satisfaction construct requires identifying the key antecedent factors in this research context. Moreover, formative measurement of these factors entails establishing the relevant indicators which fully describe each factor.

The review of existing literature on the subject, qualitative discussions with soccer fans, and a detailed discussion with an expert from a major soccer club revealed the key drivers of fan satisfaction. Five major themes that have an influence on soccer fans’ customer satisfaction could be identified from the literature research: stadium-related factors (e.g., construction aspects and cleanliness), services related to stadium visits (e.g., travelling conditions, catering, and entry fees), auxiliary services (e.g., fan shops and club office), sport and team composition (e.g., quality of the team and the coach), as well as the club characteristics (e.g., club traditions).

Qualitative interviews with soccer fans provided additional confirmation about the relevant factors. Fans were asked to provide statements on specific aspects of their favourite club that would (dis)satisfy them and the factors that have a potential influence on fan satisfaction. In addition, the already identified items were discussed with the respondents. Besides the above-mentioned themes, fan-specific criteria relating to, for example merchandise or fan support services were also recognized as being relevant.

As a concluding step in the search for indicators, these results were discussed with an expert from the club and individual items were refined. Altogether, 108 items were identified which, in the view of the expert, all include relevant aspects for the measurement of a fan’s overall satisfaction. Subsequently, these items were subjected to empirical testing. Following the steps suggested by authors such as Gudergan et al. (2008), using principal components analysis a preliminary factor structure was established which was then evaluated by experts with regard to content validity. The discussion with experts yielded a model with 17 factors measured by, in total, 99 items. Figure 1 shows our path model with formative latent constructs. This instrument allows estimation of the relative importance of each relevant factor on a fan’s overall satisfaction judgement.

**Empirical study and results from the PLS analysis**

In order to validate the developed measuring instrument which we had pre-tested, a written survey was carried out for the final analysis. A total number of 1,054 people agreed to participate in our survey with a notably high number of 623 responses (return rate: 59.1%) yielding 600 usable responses after excluding 23 that were incomplete. This study employs the partial least squares (PLS; Henseler, Ringle and Sinkovics, 2009) method to analyse the data. For parameter estimation, we use SmartPLS 2.0 M3 (Ringle, Wende and Will, 2005). Figure 1 shows the results for the standardized path coefficients, the corresponding t-values (in brackets) and the $R^2$ value of the endogenous latent target variable. The components which have a significant effect on overall satisfaction are indicated in bold.
The evaluation of the PLS path modelling results draws on the systematic approach and criteria checklist suggested by Henseler, Ringle and Sinkovics (2009). The analysis of the exogenous latent variables’ formative measurement models showed that nearly all relations are significant. The level of multicollinearity was assessed by means of the variance inflation factors (VIF). In this study, the formative measurement models do not exhibit a critical level of multicollinearity as all VIF values lie below the critical threshold value of 5. The endogenous latent variable overall satisfaction (i.e., fan satisfaction) has an $R^2$ value of .455 which is, according to Chin (1998), substantial. The analysis of the Stone-Geisser criterion $Q^2$ results in a value of .378 which indicates predictive relevance of the overall path model.

In conclusion, the PLS path model estimations provide valid results at highly acceptable levels when considering the complexity of this analysis. However, 17 factors explain less than half of fan satisfaction’s variance and one may expect a higher $R^2$ outcome. Other studies for this type of service industry show strong effects by emotional factors such as enthusiasm (Höck, Ringle and Sarstedt, 2009). Emotional factors may be eligible for explaining large portions of the unexplained variance in this research, which focuses on factors that are controllable by the soccer club’s management and allow originating clear-cut managerial implications for future actions.

The analysis identifies seven key factors that exert a statistically significant influence on the fans’ overall satisfaction judgement:

- Satisfaction with the stadium (path coefficient: .245),
- Satisfaction with the team (path coefficient: .162),
- Satisfaction with the fan-based support (path coefficient: .143),
- Satisfaction with the club management (path coefficient: .141),
- Satisfaction with the atmosphere during a visit to the stadium (path coefficient: .086),
- Satisfaction with the club’s internet site (path coefficient: .061), and
- Satisfaction with the accompanying entertainment (path coefficient: -.102)

The path coefficients reveal the relative importance of each significant factor. The stadium factor has the highest impact on overall satisfaction. This factor is followed by satisfaction with the team, satisfaction with fan-based support, and satisfaction with the club management. Significant but less important components are the atmosphere experienced in the stadium and the internet site. The
negative weight of the accompanying entertainment seems implausible at first glance. A possible explanation for this phenomenon could be that fans regard the accompanying entertainment, for example the half-time entertainment, in a generally positive light but are fixated on the soccer match and therefore find an extensive entertainment program distracting.

**Impact-performance implications**

For the target variable overall satisfaction, the impact performance map (Anderson and Fornell, 2000; Kristensen, Martensen and Gronholdt, 2000) extends the above PLS results for the path coefficients (impact) by including the PLS latent variables scores (performance) into the analysis. In Figure 2, the path coefficients calculated in the PLS analysis represent the exogenous latent components’ influence on the overall satisfaction level (impact). An index of the accompanying indicators’ ratings is added representing the latent factors’ satisfaction values. Values are therefore determined for each latent variable by using each indicator’s weight and value. The average value of these scores reflects the latent variables’ satisfaction value (performance).

![Figure 2: Impact-Performance Map of overall satisfaction](image)

From the impact-performance map of overall satisfaction (Figure 2) we can conclude that satisfaction with the stadium represents the factor with the highest priority for managers of this particular club. This factor is followed by team, fan-based support and club management. All four components show ratings from average to good. Actions for improving the overall satisfaction should therefore be aimed particularly at the stadium, but also at the team, the fan-based support and the club management. Improving overall satisfaction by means of these factors will ultimately have an effect on the fans’ overall satisfaction. The situation in respect of the factor atmosphere experienced during a visit to the stadium is different. As this factor scores high on the performance dimension, the objective should be to maintain this position. All other factors have only marginal significance regarding overall satisfaction; their ratings do not therefore require attention.

Decisive actions for improving overall satisfaction can be derived from item-specific impact-performance maps of the most influential components. From the impact-performance map of satisfaction with the stadium, for example, it becomes obvious that the name of the stadium is of particular importance. The name is the most important aspect in respect of satisfaction, but the fans did not rate this as satisfying. Here, actions should be taken to increase acceptance for the (recently changed) name. In addition, criteria such as signposting inside the stadium, representation of the sponsors and video scoreboards have a great deal of influence on satisfaction with the stadium. While the video scoreboards already receive ratings from good to very good, the signposting inside the stadium and especially the representation of the sponsors show potential for improvement. The condition of the restrooms should also be improved. This aspect has less influence than the ones
mentioned so far, but the below average rating calls for attention. The view onto the playing field has an average influence on satisfaction with the stadium and is already rated as very good. Aside from the criteria mentioned so far, comfort of the seats and interior design of the stadium are worth mentioning. These two indicators are rated as satisfying by the fans and need not be further improved, but due to their influence, they should also not be ignored. All other aspects are only of marginal significance for satisfaction with the stadium and are rated from average to positive.

Conclusion and future research

Satisfaction, in general, and with services, in particular, has been a widely studied phenomenon. In this paper with examine the impact-performance implications of various antecedents factors on understanding variations in overall service satisfaction judgements. We draw on service and other activities put in place by soccer clubs to illustrate these implications. Despite the obvious relevance of this topic and of services provided by soccer clubs, little attention has been paid to the measurement of fan satisfaction, thus far. The PLS path modelling analysis shows that some factors have greater influence on overall satisfaction experienced by fans than others. We identify (1) satisfactions with the stadium characteristics, (2) satisfactions with the team aspects, (3) satisfactions with the club and (4) satisfactions with the club management’s support for fans as key drivers of overall satisfaction. The presented conceptualisation explains about 50% of the overall satisfaction judgement. The model assessment substantiates the reliability and validity of the PLS path modelling results.

Linkage of the PLS path analysis method with the impact-performance mapping technique points to significant areas for improvement of management activities. Given the key factors’ formative operationalisation by observed indicators, this technique for the management-oriented processing of the results of a PLS analysis is particularly instructive in the presented model set-up. The stadium is the factor with the highest priority for the management of a soccer club to affect overall satisfaction. An additional impact-performance map analysis on the indicator level of this latent factor shows that, for example, the name of the stadium exerts a great deal of influence on overall satisfaction. This aspect can become particularly problematic if fans do not accept the new sponsor responsible for re-naming the soccer stadium. Contrary to this, for the stadium under consideration, the fans generally perceived the atmosphere experienced during a match as positive. Future promotional marketing activities could therefore focus more strongly on this aspect.

Finally, the limitations of the study and the further need for research should be pointed out. Although the measurement instrument developed in this study provides important information regarding the overall satisfaction of a club’s fans, the exploratory approach to, and the poorly researched area of, measuring the satisfaction of soccer fans should make it the starting point for future research. Based on these results, the instrument can be used for benchmarking studies and additional improvements. An international application and comparison of results in different service industries also remains a crucial issue for future research. Finally, this research does not account for the problem of unobserved heterogeneity (Sarstedt and Ringle, 2010). Visitors to sporting events are very likely to be heterogeneous (Kennett, Sneath and Henson, 2001) and, hence, the PLS path model may result in significantly different group-specific estimations. Additional analyses could potentially lead to identifying and interpreting such groups to provide further differentiated findings and more effective recommendations for the management of service organisations, in general, and soccer clubs, in particular.

As a concluding take-away, our illustration of the use of the impact-performance map to deduce implications for understanding how to manage the service offering of soccer clubs yields insights for services marketing, in general. Consequently, the approach presented in this paper is useful from a managerial perspective in that it not only allows developing a better understanding of but also more prescriptive insights into the design and management of services and their impact on satisfaction judgements.
References


The ANZMAC 2009 conference theme ‘Sustainable Management and Marketing’ explores the critical issues facing our local, national and global community. This year's conference is unique in that it brings together the Australian and New Zealand Marketing and Management academic communities as represented by ANZMAC and ANZAM respectively. We look forward to the opportunity to facilitate a broader exchange across these 2 communities with Monash hosting consecutive conferences, and we particularly look forward to sharing a common day on Wednesday 2nd December.

Our invited speakers are internationally recognised and highly regarded in their respective fields of sustainability and environmental strategy and it is hoped that ANZMAC 2009 will provide educators, marketing practitioners and leaders from corporate, not-for-profit, government and community sectors the opportunity to connect professionally and socially to make an invaluable contribution to achieve sustainable management and marketing.

We trust that delegates will take away some valuable insights and a deeper understanding of how to responsibly advance our discipline in the face of these challenging times.