Yield management in professional football

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Aim of paper and research questions

Clubs of the Fußballbundesliga, the German first football league, work almost at full stadium capacity: In the season 2008/09 on average more than 41,900 spectators have been visiting the Fußballbundesliga matches, corresponding to 90.5 percent of the available spectator capacity (DFL, 2009). As the clubs of the Fußballbundesliga are continuously trying to increase their revenues, particularly in times of the economic crisis as well as disappointing media rights revenues, the clubs need to rethink their ticket pricing. In cooperation with a Fußballbundesligist we therefore analysed the applicability of yield management in professional football. Thereby, our empirical study aimed at:

- 1. Identifying market segments of the club's spectators that can be differentiated by their price sensitivity;
- 2. Determining the size and willingness-to-pay of each individual market segment for a matchday.

Literature review

Yield management is a specific form of market segmentation that has been particularly applied to services that are characterised by inflexible capacities and high fixed costs (Meffert & Bruhn, 2006: 570). "[It] operates on the principle that different segments of the market have different degrees of price sensitivity" (Monroe, 2003: 421), and is – following microeconomic pricing theory – a form of pricing discrimination of second degree (Diller, 2008: 497). Yield management is defined as an integrated price and capacity management concept that partitions the capacity into separate sections and develops suitable pricing categories for these sections in order to maximise a company's profit (Corsten & Stuhlmann, 1998: 7).

Even though yield management was applied in various industries from the 1970s (Harris & Pinder, 1995) and scientific interest started in the end of 1980s (Desiraju & Shugan, 1999: 45), yield management has not been applied in professional football so far, since most approaches have only analysed the pricing categories without any respect to the management of fixed capacity (Clowes & Clements, 2003; Howard & Crompton, 2004). It therefore seems to be necessary developing an industry-specific approach for professional football (Lindenmeier, 2005: 73).

Research design and data analysis

We interviewed 781 football fans in the stadium (on four different matchdays, n=162) and in the city center (in three different shopping centers, n=619). In the stadium we recruited participants during the two and a half hours before the match started, in the shopping center between 10 a.m. and 8 p.m. on two consecutive days of the week. The survey form, ten pages in length, included demographic information (age, gender etc.), questions about the respondent's sport consumption

(interest in football, Sport Spectator Identification Scale etc.) and the task to evaluate nine product-service offerings (four attributes with each three levels: opponent; seating category; attendance; price). We analysed the data by using two methods, limit conjoint analysis (Voeth & Hahn, 1998) and – based on its results – we conducted a hierarchical cluster analysis (Perrey, 1998: 185). To estimate the willingness-to-pay we followed the procedure suggested by Jedidi and Zhang (2002).

Results

42.6 % of the customers of the Fußballbundesliga club are price sensitive. For the remaining part of the customer base – 57.4 % – the ticket price is of small importance when deciding to buy a ticket for a Fußballbundesliga match or not: 34.5 % buy the ticket primarily with regard to the team the Fußballbundesligist is supposed to play against, for 11.7 % most important is the attendance, i.e. that the stadium is sold out, 11.2 % derive their value from the location of their seat (seating category). Conducting a contingency table analysis (Backhaus, Erichson, Plinke & Weiber, 2003: Ch. 4) we find that the grouping of the participants into the identified market segments is independent of the location of the interview (χ^2_{df} =3 = 4.6; p = .21).

The willingness-to-pay has been determined in general and for all market segments. We found, among others, that the customers are up to pay – on average – additional 60 Euro in the case of a top match. To sit in the best category in the football stadium is from a customer's point of view on average 20 Euro more worth compared to seating in the worst category.

Discussion and conclusion

By developing an industry-specific yield management approach for professional football as well as empirically confirming its applicability, we contribute considerably to the current literature on yield management. As our findings suggest the Fußballbundesligist should in future apply a more market-research-based pricing scheme instead of its existing, experienced-based one; by doing so the Fußballbundesligist will be better able to skim the customers' maximum willingness-to-pay.

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