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Servicescape in Sports: levels of fan satisfaction in a UK Rugby League club

David Bamford (David.Bamford@hud.ac.uk)
University of Huddersfield, the Business School

Benjamin Dehe
University of Huddersfield, the Business School

Abstract
A professional Rugby League club, well established in the UK Championship, sought to place the fans at the centre of the club’s on-going operational and business strategy. The club directors wanted to increase the home game attendance to sustain the club in the longer run. They needed to understand the club fan base and to use this evidence to improve the home game attendance figures. A survey was designed for the fans (N=511) to express their expectations in order to improve the service quality. This research has contributed to informing and shaping the future operations strategy of the club.

Keywords: Sport environment, Strategy, Fan satisfaction

Introduction
Dale et al. (2005) published a study reporting the fans perceptions of a rugby league club. It had 290 respondents and focused on three service quality aspects i) the functional quality perception, such as the entertainment activities; ii) the technical quality perception, such as the success of the team, and iii) the value perception. The findings outlined the spectators’ profiles, assessed the impact and perceptions of the pricing policies, defined factors influencing attendance, and created initiatives to attract new and lapsed fans. The club has substantially evolved since, it moved into new facilities in 2008, a state-of-the-art stadium with a total capacity of 12,500. The stakeholders believed that this would inflate the home game attendance; however, average home attendance from 2008 to 2011 was of 2222 with a high variation (std dev=592), and the change of stadium did not lead to the expected increase in the attendance. Therefore, in this research the authors wanted to re-explore what factors and initiatives the club could take to increase its home game attendance. Full access was arranged and engagement set-up with both the club directors, staff, players and fans forums.

Literature Review
Operations service quality as a strategy weapon to increase customer satisfaction
Clemes, Brush and Collins (2011, p.370) explained that sports clubs and organisations evolve in a very competitive and fierce environment and to succeed they have to strategically manage spectator perceptions of service quality and understand how these perceptions affect value, satisfaction and behavioural. Customer satisfaction has been
the focus of a substantial amount of research across several industries, through diverse disciplines (Van Doorn et al, 2010).

However, Van Leeuwen et al (2002, p.100) assessed that despite the abundance of literature no agreement on the ‘exact nature of the customer satisfaction’ has been established especially in the sport environment. Having said that, it could generally be defined as the satisfaction perceived by the individual consumer of the received product or service. Johnston et al (2012, p.102) defined the satisfaction as the result of customers’ overall assessment of the process, their experience and the outcome considering the quality and the value for money. A suitable function to measure the satisfaction is by comparing customer perception with their expectation.

Van Leeuwen et al (2002, p.100) clearly stated that to sustain sport organisation must, as any other businesses, identify the customer needs and expectations and learn how to satisfy them. In their paper, they mentioned that this has not been specifically explored in the sport environment, which is in line with Bamford et al (2012) findings, showing the gap of Operations Management applied research in the sport environment. Therefore, this research attempted to analyse the ‘voice of the fans’, which enable the board of directors to make informed decision based on this valuable input. It is assumed that in order to achieve customer satisfaction the club needs to develop an operations service quality strategy in line with the fans perspective. It is also accepted that sport fanaticism can be reduced by several factors both internal and external to the club, such as “trading of players, mergers of sport teams, rule changes, increasing ticket prices and hyper-commercialisation of modern sport” (Van Leeuwen et al, 2002, p.100), but also change of stadium and identity or board of directors. Therefore, professional clubs need to assess the factors and ensure customer satisfaction.

**Club Sport Consumer**

Scharz et al (2010, p.160) explained that there are two main categories of sport consumers, the participant: players, athletes, coaches, trainers and managers, and the spectators. In this paper the focus remains on the latter categories. The spectators are more complex to identify and their behaviours very different. Scharz et al. (2010, p.160) offered a classification to sport consumer: the fanatics, club loyalist, also referred to as the hard core fans; and the newer fans. The newer fans can be also categorised further into the social viewers, opportunistic, and the sport indifferent consumers. Similarly, Dale et al, (2005) segmented them as recently converted, part timer, fair weather or yet to be converted. The rationale for categorising the different sport consumer is, the same as in any other businesses, deploying appropriate strategies in order to satisfy them and aiming at sustaining or to some extent increasing attendance.

Cleem, et al (2011, p.370) explained that one of the major tasks facing sports operations service quality and marketing managers is sustaining a keen interest in the sporting event and ensure this interest is translated within the home game attendance, however, recognising the lack of direct control over the variables contributing to the fans’ attendance. It is suggested that the managers’ responsibilities will be to design services which ensure the fans to have a positive experience, even when the on-pitch performances are not matching their expectations. Managers will need to appreciate and measure which dimensions spectators perceive as important and then shape the surrounding club service scape accordingly (Kelley & Turley, 2001).

**Demand and attendance factors**

Dale et al (2005, p.471) reviewed the literature on attendance and summarized their findings. They were able to establish that home game attendance has been used as a
main indicator to evaluate the general off-pitch performance of the club form a non-
direct financial indicator. Moreover, it is relevant as it can be assumed there is a certain
association between the home game attendance, the club popularity and the club
profitability. Garcia Villar and Guerrero (2009) explained that professional sport
organisations ‘do not necessarily behave as other traditional profit maximising firms
that try to eliminate their competitors’ to gain market share. On the contrary, sports
organisations must collaborate with their competitors to attract spectators. The
spectators’ decision to attend is not only affect by economical factors but also by the
sport outcome characteristics such as the expected quality, and uncertainty of outcome.

Garcia Villar and Guerrero (2009) categorised the determinant of attendance under
four themes: i) Economical aspects, which is included in every demand model and can
be measured through the ticket price, season ticket price, prices of substitutive goods at
and around the club and income. ii) Expected quality aspects, this needs to be taken into
the equation, but is complex since all the matches are different, it has been shown the
positive effect of the team success onto the attendance. Quality has been measured using
league ranking, player quality, excitement game expectation, the special interest of the
game and the contestant. iii) Uncertainty of outcome, the authors stated that ‘the appeal
of a match is higher if the outcome is uncertain, than if one of the team is presented as
the clear favourite, which lead to consider than higher uncertainty grade attract a larger
number of spectators’ (Garcia Villar and Guerrero, 2009, p.140). iv) Opportunity cost
and other factors, which are the characteristics surrounding the game, the authors
explained that attendance at live sporting game involve some other costs on the top of
the tickets such as transportation, food and drinks, which might influence the overall
decision to attend. Moreover, the weather, TV broadcasting, the day and time of match
are also important factors to understand attendance.

However, Sloane (1971) explained that the most important factor is the success of
the team, because this is what is valued by the supporters (Garcia Villar and Guerrero,
2009). Yoshida, et al (2012) explained that limited attention has been devoted to the
study of the innovation of sport event experiences: visual and sound system, the stadium
access, the seating and fans position in stadium. In their paper they proposed a
conceptualisation of sport event innovativeness composed of player performance,
respectful access, self-service technology, aesthetic environment, fan community and
loyalty program and measure their relationships with the spectators and fans behaviour.

Therefore, in this paper the authors developed a survey a tool that will support the
board of directors to better understand their fans and consumers expectations and
behaviour, the results allowing the directors to shape future decision (Schwarz, et al.
2010, p.158). To structure both the research and this paper two research questions
(RQs) are investigated:

i) RQ1 = What are the key components influencing home game attendance in this
particular club?

ii) RQ2 = What could the club do and implement to increase home game
attendance?

These were developed as a useful starting points regards structuring the data set
collection. They helped gain access to the club and will be further developed as the
research theme is augmented going forward. This whole subject theme and context has
had very little attention from the operations management community to date (Bamford
et al, 2012). Part of the emergent opportunity here is to apply operations management
concepts and principles, in this case on the aspects of service quality, in the field of sport.

Methodology
The survey was designed empirically based upon a review of appropriate literature sets and the club objectives. Some of the items were adapted and utilised from Dale et al., (2005). The final survey was developed with 77 questions in 9 different sections. Using a 6-point Likert scale, questions were set to identify the fan profiles and behaviours, and their expectations, establishing the factors influencing attendance, as well as collecting, through open input boxes, their opinion on what the club could do to improve attendance. After a thorough review of the questionnaire survey by the members of the club’s board of directors, it was piloted over a one month period by academics in Operations Management and a small sample of sport fans (N=12). The comments and results were taken on board and amendments were made accordingly.

The survey was then open for six weeks from the 1st of September 2012 and facilitated using a web application tool. In order to ensure as wide a participation as possible the authors also facilitated a session at a club supporters event where paper copies were distributed and collected. This data then being input into the web application tool. The total sample collected was N=511. The data was then analysed using SPSS. The authors also analysed home game attendance data from 2006 to 2011 in order to both triangulate the results and to inform future operational strategy development using as much of an evidence base as possible.

Findings
Respondent and fans profile
The sample respondents were predominantly male, 84.15%, and indicated their age as < 20 (4.31%), 21-40 (25.83%), 41-60 (47.16%) and > 61 (22.70%). 60.67% of the respondents indicated they are married. Well over half of the respondents categorised their occupation as full-time (58.90%), 21.14% as retired, 4.89% as students, and 3.52% as unemployed the other respondents mentioned either part-time or other. Moreover, 85% of the respondents indicated a household income below £60k.

Moreover, it is important to note that 82% of the respondents lived within a 10 miles radius of the stadium, 49% attended away games, and 74% attended more than five home games in any one season. In line with this, in relation a question on the fans’ segmentation, 59.5% of the respondents considered themselves as ‘hard core’ fans, the most loyal supporting group, 27% as former hard core fans, 5.3% as recently converted fans, 5.1% as part timer fans, 1% as fair weather and 2.2% as yet to be converted. (these categories were adapted from Dale et al, 2005).

38% of the respondents currently hold a season ticket and 50.2% stated that they attended more than nine home games this season.

Attendance data and profile
Since the club moved into the new stadium (in 2008) the average attendance increased by 215 spectators per game (about 11%) compared to 2006 and 2007 as shown in Table 1. This did not have a significant statistically positive influence on the home game attendance. From undertaking a Two-sample T-Test, p value = 0.170 > alpha (=0.05), there is no significant difference between the two samples. Moreover, by investigating the individual attendance data from 2006 to 2011, it appears stable and fairly predictable.
Table 1: Average of the attendance from 2006 to 2011

<table>
<thead>
<tr>
<th>Data</th>
<th>Average</th>
<th>std dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average 06-07</td>
<td>2007</td>
<td>513</td>
</tr>
<tr>
<td>Average 08-11</td>
<td>2222</td>
<td>592</td>
</tr>
<tr>
<td>Average 06-11</td>
<td>2154</td>
<td>572</td>
</tr>
</tbody>
</table>

Fans’ expectations

The survey was designed taking into account the different factors that influence professional sporting event attendance (Clemes et al., 2011; Byon et al., 2010; Dale et al., 2005; Garcia Villar, et al, 2009; Yoshida, et al, 2012). 12 items were developed to measure what are the most important expectations that the rugby club’s fans have. ‘Seeing a committed team with lots of fighting spirit’ (mean = 5.78), ‘seeing an exciting and attractive game style’ (mean = 5.29), and ‘experiencing a cheerful atmosphere in the stadium’ (mean = 5.10) were the three first expectations that the respondents had. Furthermore it was established that for 70% these three factors were the core ingredients to satisfy their expectations. These appear reasonable considering they are the main functions of the rugby club.

However, fewer expectations were about: ‘having entertaining activities before the game and at half time’ (mean = 3.37), ‘having children’s activities before the game’ (mean = 3.26), and ‘having business networking opportunities’ (mean = 2.50). This was evidently not a priority for the hard core fans (who made up the majority of the respondents) but they did acknowledge in the open dialogue boxes that these type of initiatives could be an incentive for attracting new fans.

Table 2: Fans’ expectations

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>See a committed team with lots of fighting spirit</td>
<td>511</td>
<td>5.78</td>
<td>0.712</td>
</tr>
<tr>
<td>See an exciting and attractive game style</td>
<td>511</td>
<td>5.29</td>
<td>0.947</td>
</tr>
<tr>
<td>Experience a cheerful atmosphere in the stadium</td>
<td>511</td>
<td>5.1</td>
<td>1.092</td>
</tr>
<tr>
<td>Watch the game in a high quality stadium</td>
<td>511</td>
<td>4.98</td>
<td>1.222</td>
</tr>
<tr>
<td>Experience easy access to the stadium</td>
<td>511</td>
<td>4.96</td>
<td>1.278</td>
</tr>
<tr>
<td>Share with other fans the same passion after the game</td>
<td>511</td>
<td>4.43</td>
<td>1.566</td>
</tr>
<tr>
<td>Enjoy a relaxing time at the game</td>
<td>511</td>
<td>4.34</td>
<td>1.445</td>
</tr>
<tr>
<td>Attend a game with lots of tries</td>
<td>511</td>
<td>3.98</td>
<td>1.319</td>
</tr>
<tr>
<td>Spend quality time with your family</td>
<td>511</td>
<td>3.92</td>
<td>1.782</td>
</tr>
<tr>
<td>Have entertaining activities before the game and at half time</td>
<td>511</td>
<td>3.37</td>
<td>1.584</td>
</tr>
<tr>
<td>Have children’s activities before the game</td>
<td>511</td>
<td>3.26</td>
<td>1.66</td>
</tr>
<tr>
<td>Have business networking opportunities</td>
<td>511</td>
<td>2.5</td>
<td>1.661</td>
</tr>
</tbody>
</table>

Reliability Cronbach alpha = 0.79, which indicate a high level of internal consistency of the scale with this specific sample.
Factors and initiatives influencing attendance

As suggested by the literature (c.f. Garcia Villar and Guerrero, 2009), the economical factors are important, however, not exclusive to increase attendance. From the survey, as illustrated in Table 3, ‘Good value for money’ (mean = 4.50), ‘a successful team’ (mean = 4.08) and ‘club and players involvement in the local community’ (mean = 3.97) were the primary factors that would influence home game attendance.

On the other hand, ‘large group discount’, ‘match day entertainment activities’ and ‘dedicated transport to ground’ were not seen as key characteristics. This can be related to what Garcia Villar and Guerrero (2009) called the opportunity cost and other factors.

<table>
<thead>
<tr>
<th>items</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good value for money</td>
<td>509</td>
<td>4.5</td>
<td>1.605</td>
</tr>
<tr>
<td>A successful team</td>
<td>509</td>
<td>4.08</td>
<td>1.533</td>
</tr>
<tr>
<td>Club and players involvement in the local community</td>
<td>507</td>
<td>3.97</td>
<td>1.681</td>
</tr>
<tr>
<td>The visiting teams reputation and quality</td>
<td>502</td>
<td>3.83</td>
<td>1.633</td>
</tr>
<tr>
<td>Early bird offers</td>
<td>504</td>
<td>3.66</td>
<td>1.891</td>
</tr>
<tr>
<td>High player profile</td>
<td>507</td>
<td>3.62</td>
<td>1.496</td>
</tr>
<tr>
<td>Stories on the club in the local paper</td>
<td>505</td>
<td>3.37</td>
<td>1.75</td>
</tr>
<tr>
<td>Family ticket discount</td>
<td>502</td>
<td>3.35</td>
<td>1.944</td>
</tr>
<tr>
<td>Advertising in the local paper</td>
<td>504</td>
<td>3.24</td>
<td>1.805</td>
</tr>
<tr>
<td>Pre and post-game events in the Village bars</td>
<td>503</td>
<td>2.94</td>
<td>1.684</td>
</tr>
<tr>
<td>Pre match game</td>
<td>511</td>
<td>2.94</td>
<td>1.675</td>
</tr>
<tr>
<td>Large group ticket discount</td>
<td>504</td>
<td>2.79</td>
<td>1.861</td>
</tr>
<tr>
<td>Match day entertainment activities</td>
<td>509</td>
<td>2.78</td>
<td>1.619</td>
</tr>
<tr>
<td>Dedicated transport to ground</td>
<td>503</td>
<td>2.57</td>
<td>1.778</td>
</tr>
</tbody>
</table>

The reliability of the scale, a Cronbach’s alpha 0.92, indicates a very high level of internal consistency for this specific sample.

Attracting new or lapsed fans

The club was keen to consult with existing fans to understand further what could be done to attract new fans. Therefore, 10 items were developed as summarised in Table 4. It came as no surprise that promotion to the super league was the highest perceived mechanism to attract new or lapsed fans (mean = 5.41). Although ticket price discounts was not a major initiative for the respondent attendance, they recognise it could be critical for attracting new fans (mean = 4.53). ‘Promotions in the Sports Village bars’ was also rated well (mean = 4.13).
Reliability of the scale Cronbach’s alpha 0.87 indicates a very high level of internal consistency for this sample set.

The days and times factors
As mentioned in the literature (Garcia Villar and Guerrero, 2009) the day and time is also an important factor that needs to be considered. From the survey, respondents claimed that for 61.1% the day on which a match is held directly influenced their attendance. For 75.5% Sunday is the favourite day for attending, and Monday and Thursday are the least favourite day, respectively 32.5% and 28%. However, Figure 1 below shows otherwise. From the attendance data from 2006 to 2011 we plotted the attendance per day and Thursday was identified as having the highest average attendance and Sunday the lowest. This was directly opposite the opinion reported by the fans.

![Boxplot of attendance](image)

**Figure 1: Attendance in function of the day**

Scale rating = 1: Monday, 2: Tuesday, 4: Thursday, 5: Friday, 6: Saturday, 7: Sunday (there were no games on Wednesday)

Discussion
So, what are the key components influencing home game attendance (RQ1)? Based upon the literature review there are a number of key aspects to this important
operational area, these are: i) Operations service quality as a strategy weapon to increase customer satisfaction; ii) Club Sport Consumer; and iii) Demand and attendance factors. With regards to i) Operations service quality as a strategy weapon to increase customer satisfaction - Clemes et al (2011) believe that to succeed sports clubs have to strategically manage spectator perceptions of service quality and understand how these perceptions affect value, satisfaction and behaviour. Unfortunately, as per Van Leeuwen et al (2002), in the sport environment no agreement on the exact nature of customer satisfaction has yet been established. This is certainly true when examining the results from the survey as it became evident that no strategic intent exist regards to service quality. Rather, the club directors had focused upon financial survival and whilst some marketing techniques had been deployed (mixed/variable pricing polices), no attention had been consciously given to the operational service quality areas.

In terms of ii) Club Sport Consumer - Kelley & Turley (2001) suggested that managers need to appreciate and measure which dimensions spectators perceive as important and then shape the surrounding club servicescape accordingly. Despite the efforts of Dale et al (2005), no use had been made of the segmented spectators model to inform or help design the clubs external face. Clemes et al (2011) reinforces this by advocating that sports operations service quality and marketing managers sustain a keen interest in the sporting event and ensure this is then translated to the home game attendance.

For iii) Demand and attendance factors - Yoshida, et al (2012) describe that limited attention has been devoted to the study of the innovation of sport event experiences (such as the visual and sound system, the stadium access, the seating and fans position in stadium). Whilst each of these factors existed within the club none had, to date been regarded as being operationally strategically important. They were more a factor of the pre-existing design of the facilities, rather than elements that could be influenced to impact the operational outcome (more fans attending the games).

With regards to RQ2 - What could the club do and implement to increase home game attendance? Based on the analysis and the ‘voice of the fans’, the authors have been able to identify potential solutions to increase the home game attendance (Clemes et al, 2011). For instance, it is suggested that focusing on the on-pitch performance and encouraging the team to adopt an attractive game style, as well as integrating player profiles within the club culture and strategy – both during the recruitment and the then selection, emphasises the importance of players ‘fighting spirit’. This would also impact on the ‘on-pitch commitment’ and, according to the survey results, appeared even more important than the final result (who won or lost).

Moreover, from an operational perspective it was suggested that factors such as: the visual and sound system, the stadium access, the seating and fans position in stadium were important. Especially when thinking through what to improve regards the servicescape and the atmosphere at the stadium.

It is relevant here to note that these expectations are variables belonging to what the authors have called the i) ‘sport team and environment’ factors, e.g. on-pitch performance, fighting spirit, player commitment, attractive game style and opponents. The three other factors identified are the: ii) ‘servicescape innovation and the communication’, as per Miles et al (2012), e.g. the physical surroundings in which the service takes place, pre-match and half-time entertainments, club involvement in the community, website and marketing; iii) ‘the value for money’, e.g. ticket price, season ticket, promotion at the sport village bars and; iv) ‘the environment characteristics’.

Please see Figure 2 for a diagrammatic representation of these Expectation Variables.
Conclusion
This research contributes to informing and shaping the future operations strategy of this Rugby League club, in an evidence based manner. It also makes a contribution by applying operations management concepts and principles, in this case aspects of service quality, in the field of sport. This has had very little attention from the operations management community so far (Bamford et al, 2012).

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