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Beyond *Moneyball*: Using Data Analytics to Improve Performance in Elite Team Sports

Bill Gerrard, *Leeds University*

Bill Gerrard, D.Phil., is a professor of business and sports analytics and the program director of the BSc Business Analytics program in the Leeds University Business School. His research focuses on the statistical analysis of performance data within an evidence-based coaching regime in both individual and team sports to support decisions on talent identification, player recruitment, athletic development, training priorities, team selection, game tactics, and injury management.

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What is Sports Analytics?

Farhan Zaidi is a Massachusetts Institution of Technology (MIT) and University of California-Berkeley graduate who started in Major League Baseball (MLB) as a data analyst with the Oakland Athletics before being promoted to Director of Baseball Operations and then Assistant General Manager. His success with the A's led to Zaidi being appointed General Manager of the Los Angeles Dodgers in November 2014. He is no exception, as more and more teams are hiring data analysts (or data scientists) to work alongside their video performance analysts and these data analysts are now beginning to occupy senior positions in sports organizations. Sports analytics is creating a real buzz in elite team sports these days. Industry conferences on the subject are becoming a regular event. Further, books, journals, websites, and university courses on sports analytics are now common.

But what is sports analytics? Alamar (2013) provided a very comprehensive definition of sports analytics as “the management of structured historical data, the application of predictive analytic models that utilize that data, and the use of information systems to inform decision makers and enable them to help their organizations in gaining a competitive advantage on the field of play” (p. 4). My own definition of sports analytics is the use of statistical analysis and other related analytical techniques to support decision making in sports organizations. Quite simply, analytics is “analysis for purpose.” Analytics is driven by the imperative to produce analysis to inform managerial decisions on the best courses of action to improve future performance and increase the likelihood of successful outcomes. Although there are a number of applications of data analysis in both the sporting and business operations of pro sports teams, I reserve the

term “sports analytics” to the analysis of performance data from competitive games to support the decisions of coaches, sporting directors, and general managers. Sports analytics is about using statistical and other data analytical methods to provide evidence to input into decisions on talent identification, player development, training schedules, performance reviews, team selection, tactical game plans, and player recruitment.

Sports analytics should be seen as a key component of the move towards evidence-based management (e.g., Pfeffer & Sutton, 2006) within the sporting operations of teams. Rather than relying on assertion and anecdote to justify decisions, evidence-based management starts from the premise that effective decision making requires a forensic investigation of the available relevant evidence. Evidence-based management recognizes the partiality of our knowledge in complex decision situations. As Pfeffer and Sutton (2006) put it, “evidence-based management is conducted best not by know-it-alls but by managers who profoundly appreciate how much they do not know” (p. 73). A strong commitment to evidence-based practice is a key characteristic of the organizational cultures and leadership values of those sports organizations that have developed an effective analytics capability.

As well as a cultural and leadership commitment to evidence-based management, the effective use of analytics in any organization requires that analysts combine the “hard” technical skills with “soft” people skills. Analysts need to be skilled in the three Ds of analytics: data analysis, decision making, and domain knowledge. Analysts are skilled in using statistical and other analytical techniques to discover patterns in the data. However, they must also be skilled in understanding the decision-making process and how best to contribute to that process by transforming managerial decisions into analytical problems. They then must be able to provide feedback in the form of actionable recommendations based on the analysis of the available data. Thus, analysts must also be adept at acquiring domain-specific knowledge to be able to appropriately model and interpret the patterns in the data. Ultimately, effective analytics always involves co-production that combines data analysis with the expertise and experience of the coaches, sporting directors, and general managers. This conclusion, based on my own experience as a data analyst in the sports industry, is consistent with the findings of decision research that has accumulated a mass of evidence over the last 60 years that shows overwhelmingly that effective decision making should combine expert judgment and statistical analysis (Dawes, 1988; Kahneman, 2012).

The objective of this paper is to map out in more detail how sports analytics can contribute to performance management in elite team sports. I will argue in the next section that sports analytics has initially been seen as a player recruitment tool as highlighted in the *Moneyball* story of how

the Oakland Athletics used data analysis in the MLB. While recognizing that *Moneyball* was a game-changer with regards to the potential for sports analytics as a competitive strategy, I will argue that the possibilities for sports analytics as a key component of a coach-led performance management system have only begun to emerge more recently as analytics has moved into the invasion-territorial team sports such as the various codes of football, hockey, and basketball. Based on my own experiences as a data analyst with one of the leading rugby union teams in Europe, I will outline the key stages in an analytics-based, coach-led performance management system that I will refer to as *The Process*. Six stages are identified: (1) Performance, (2) Observation, (3) Data, (4) Analysis, (5) Reporting, and (6) Intervention. I will conclude with some thoughts on the future development of sports analytics.

Beyond Moneyball: Taking Analytics from the Front Office into the Clubhouse

Moneyball: The Art of Winning an Unfair Game (Lewis, 2003) was a game-changer in sports analytics. The book, and subsequent Hollywood movie starring Brad Pitt, told the story of how the Oakland Athletics used analytics to make their organization more competitive despite having one of the smallest salary budgets in the MLB. It was an example of a “David” strategy on how to compete with rivals with greater resources by doing things differently. It provided a real-life example of what analytics could achieve in sport. There is nothing like success to persuade doubters. After the publication of *Moneyball*, other MLB teams started to recruit data analysts in an effort to replicate the success of the Oakland Athletics. Teams in other sports around the world also started to jump on the analytics bandwagon. There is no argument that *Moneyball*, more than anything else, has put sports analytics on the agenda in professional team sports. Yet, the *Moneyball* story needs to be evaluated carefully if the real lessons for sports analytics are to be appreciated, particularly with regards to the transferability of *Moneyball* to other sports.

The most obvious but often overlooked lesson of *Moneyball* is that it is first and foremost a baseball story. It is no surprise that sports analytics came to prominence first in baseball since the structure of the game facilitates the collection and analysis of key performance data more than any other sport. Baseball is a striking-and-fielding sport, originally organized in the mid-19th century, where the core athletic competition is the head-to-head contest between the hitter and pitcher. Fielding plays a relatively minor role in determining game outcomes. Since baseball is in essence a series of individual contests, the key performance data on hitting and pitching have been easily collected by paper-and-pencil methods and freely available via the printed media. Interestingly, Schwartz (2004) showed baseball has always been open to data analysis by anyone with an interest in the numbers.

However, the game also presents a relatively simple analytical problem for two primary reasons. First, the individual contributions of players are easily separable into hitting, pitching, and fielding. Second, there is a direct link between individual contributions and game outcomes. The issue in baseball has been more about how best to exploit the information reported in the box scores, particularly identifying the most efficient measures of hitting, pitching, and fielding.

As Schwartz (2004) described, baseball's lifelong fascination with statistics has produced a wealth of insight into the game. For example, Scully (1974) published a paper in one of the leading academic economics journals, the *American Economic Review*, that effectively set out how to put a financial value on a baseball player. Using data from the MLB in 1968 and 1969, Scully developed a two-stage procedure in which in the first stage he estimated the relationship between team performance metrics and the team winning percentage, and in the second stage he estimated the relationship between the team winning percentage and team revenue. Combining these two estimates, Scully was able to calculate the financial value of each individual player's contribution to the team's winning percentage. Scully used two performance metrics: the slugging average to measure hitting contributions and the strikeout-to-walk ratio to measure pitching contributions. Although Scully's research was directed at an academic question, namely, the extent to which market restrictions (i.e., the reserve rule) lowered salaries in the baseball players' labor market, the statistical methodology has obvious real-world applications for assessing the market value of players and identifying players whose potential contributions to winning are undervalued by the market.

Despite the developments in sabermetrics (i.e., baseball analytics), particularly the contributions of Bill James in his annual *Baseball Abstract*, first published in 1977, MLB teams largely ignored these insights. The *Moneyball* story focuses on how the Oakland Athletics used sabermetrics to gain a competitive advantage in the players' labor market. In particular, Oakland, under their general manager, Billy Beane, exploited a long-established truth in sabermetrics that the conventional hitting metrics—the hitting average and slugging percentage—are not the best metrics for measuring the win-contributions of hitters since they only focus on hits and ignore walks. Winning depends primarily on getting on base, not how you get there. Walks had been conventionally seen as more of a pitcher error, but this ignores the hitter's skill in swing selection. Oakland adopted the sabermetric recommendation to use on-base percentage (OBP) to measure hitting performance and started to identify hitters with good hitting records but exceptional OBP. Many of these hitters did not tend to attract premium salaries, but offered high expected returns per salary dollar spent.

Using OBP and other sabermetric methods alongside traditional scouting methods, Oakland achieved very high efficiency levels in regard to their ability to transform sal-

ary dollars spent (i.e., input) into games won (i.e., output). In a published study (i.e., Gerrard, 2007), I calculated the win cost per game won for every MLB team over the period 1998-2006, which covered Beane's first nine seasons as general manager at Oakland. Converting all salary spending into 1998 dollars to remove the effects of salary inflation between seasons, I calculated the average cost of every regular-season game won using the baseline of 50 wins and \$8.75 million payroll costs (in 1998 dollars). Oakland had an average cost per win of \$415,000 compared to an MLB average of \$1.02 million, implying an efficiency gain of 59.3% relative to the MLB average. In the two seasons (2001 and 2002) that provide the focus of *Moneyball*, Oakland had the second-highest regular-season win percentage in both seasons but they were the second-lowest spender in 2001 and the third-lowest spender in 2002. In 2002, Oakland won one less game than the New York Yankees but whereas the Yankees had payroll costs that season of \$125.9 million, Oakland spent only \$40.0 million.

In economics and finance, the Oakland Athletics are interpreted as exploiting market inefficiencies in the use of information. Indeed, the author, Michael Lewis, started his career as a financial trader and sees clear parallels between the trading strategies of successful financial traders and Beane's success in drafting and trading players. Two economists, Hakes and Sauer (2006), tested what they call the *Moneyball* hypothesis of market inefficiency in the MLB players' labor market. Using data for five regular seasons (1999-2003), Hakes and Sauer showed that OBP and slugging percentage are jointly statistically significant predictors of winning percentage, with OBP as the dominant predictor. However, when Hakes and Sauer estimated a salary model for MLB hitters for the period 2000-2004 based on OBP and slugging percentage and controlling for plate appearances, arbitration-eligible free agency, and catcher and infielder positions, they found that up to 2003, it was the slugging percentage that was the dominant factor in hitter salaries, with OBP being highly insignificant.

The MLB players' labor market changed significantly in 2004, following the publication of *Moneyball* in the fall of 2003. Hakes and Sauer found that OBP became the dominant predictor of hitter salaries, just what the market efficiency hypothesis would have predicted. As soon as a profitable trading strategy is revealed, other traders will imitate the strategy and the market inefficiency in the use of information will be eliminated.

With the publication of *Moneyball* and the subsequent movie, awareness of Oakland's use of analytics as a successful competitive strategy spread around the sporting world with more and more teams in different sports and countries attempting to emulate Oakland's success. Although other MLB teams were among the first to imitate Oakland, gradually data analytics moved into the invasion-territorial sports such as the various codes of football, hockey, and

basketball. However, the transferability of *Moneyball* into the invasion-territorial team sports is far from straightforward. The invasion-territorial team sports are highly tactical sports in which players must coordinate their actions when in possession to move a ball (or puck) into opposition territory to create scoring opportunities and out of possession to prevent their opponents from creating scoring opportunities. Players must continuously make decisions on optimal spatial positioning as well as making decisions on how to use the ball if they gain possession and when to challenge an opponent to try to win possession.

Players undertake a wide range of actions and this, combined with the continuity of play and the potential involvement of all players in any play, creates a degree of structural complexity in the invasion-territorial team sports that limited performance data collection historically to only appearances, scoring, and discipline. Even with the advent of video technology in the 1970s, extracting data from game videos was very time-consuming. It was not until the late 1990s that technological developments allowed player actions to be tracked efficiently. Specialized sports data companies began to emerge to provide extensive performance data to elite teams in football, hockey, and basketball on a commercial basis. The publication of *Moneyball* could not have been better timed to raise the awareness of the possibilities of data analytics in the invasion-territorial team sports just as these sports started to get access to more extensive performance data.

The transferability of the *Moneyball* approach to these sports is not straightforward. Unlike baseball, rating players in the invasion-territorial team sports cannot be reduced to a problem of deciding on the best metric to capture the single specialist contribution of players. The contributions of players in the invasion-territorial team sports are multi-dimensional, so evaluating player performance requires the development of player rating systems that can combine a number of different types of contributions into an overall rating. This raises a number of issues including the identification of the key contributions to be included in the player rating, allowing for differences in the quality and effectiveness of the contributions, separating out individual contributions from joint actions, and determining the appropriate weights to attach to the different contributions.

A particular difficulty in the invasion-territorial sports is the interdependency of player actions. Those players who score are dependent on the offensive actions of other players in gaining territory and creating the scoring opportunities. Offensive play depends on gaining possession, which, in turn, depends on defensive play. Invasion-territorial team sports are a continuous sequence of actions and evaluating individual player contributions necessitates a proper appreciation of the interdependency on the contributions of other players. In statistical terms, if the interdependency effects are not controlled for correctly, then this will bias the player rat-

ing system towards higher ratings for those players whose contributions are closer in the sequential process to the scoring outcomes.

The other major transferability issue is that a baseball-dominated perspective on data analytics can lead to a limited appreciation of the potential applications beyond player recruitment. *Moneyball* is essentially the story of applying data analytics to support the scouting function in baseball and hence it is no surprise that this has been the main application of data analytics in the invasion-territorial team sports. The tactical complexity of the invasion-territorial team sports opens up possibilities for using data analytics to support tactical decisions on the optimal game plan, team selection, and identifying the strengths and weaknesses of opposing teams and players. Data analytics can provide a very efficient way of investigating patterns of play across a huge number of games. Indeed, in terms of the ultimate scarce resource, time, once the performance data are available it makes no difference whether the data analyst is analyzing 10 games, 100 games, or 1,000 games. In contrast, for a coach to analyze just one aspect of play in one game video may take several hours. Data analytics, if done effectively, can identify the general patterns and provide the context and direction for the detailed play-by-play video analysis of the expert coach.

The Process: Developing an Analytics-Based Performance Management System

Much of my work over the last decade focused on the development of analytics-based performance management systems in the invasion-territorial team sports, principally association football (i.e., soccer) and rugby union. Between 2007 and 2010, I worked with Beane and the Oakland Athletics ownership group to investigate the possibilities for applying data analytics in Major League Soccer (MLS), in which they own the San Jose Earthquakes franchise. I developed a reporting system for the Earthquakes' games as well as undertaking more general analysis of the MLS, including identifying the critical success factors, evaluating the effectiveness of the player draft, and producing a Value-for-Money Index covering all MLS players. More recently, the collaboration with Beane has been renewed with the Dutch soccer team AZ Alkmaar, whose general manager is Robert Eenhoorn, a former MLB player. I am developing a reporting system for AZ's games while Beane has been appointed as a technical advisor to the club's board of directors.

My primary involvement in recent years, however, has been with Saracens, one of the leading teams in European rugby union. Saracens is a London-based club founded in 1876 that played in the Premiership, the top tier of English club rugby, since the professionalization of the game in 1996. Yet despite their long history, until recently Saracens had

only won one major trophy, the Tetley Bitter Cup in 1998. In 2009 they appointed Brendan Venter, the former South African international player and a qualified general practitioner, as Director of Rugby. Venter embarked on a radical restructuring of the sporting operation and, based on his medical background, started to create a new people-centered, evidence-based organizational culture. I was appointed as data analyst in March 2010 and worked directly with the coaching staff until May 2015, during which time Saracens achieved unprecedented success, appearing in nine major domestic and European semifinals and five finals, including winning the Premiership title in 2011 and 2015. My work initially focused on developing an analytics-based reporting system to review team and player performance after every game to aid the coaches in evaluating the game. Gradually my responsibilities extended to include strategic benchmarking analysis, opposition analysis, player rating, and the analysis of the relationship between physical and tactical performance data. Based on my experiences with the Oakland Athletics, San Jose Earthquakes, and Saracens as well as other consultancy projects with other teams, I now see an analytics-based, coach-led performance management system, what I refer to as *The Process*, as consisting of six stages: (1) Performance, (2) Observation, (3) Data, (4) Analysis, (5) Reporting, and (6) Intervention.

1. Performance

Performance is the be-all-and-end-all of any performance management system, yet this rather simple and obvious statement is not always fully understood and respected. Professional team sports are often described as a results-driven business, so not surprisingly match results tend to dominate the evaluation of team and player performance. The intense pressure from the various stakeholders in a professional sports team causes the owners and fans to have a short-term perspective, with a poor run of results often leading to demands for the dismissal of the head coach. These pressures are even more intense in leagues organized as merit hierarchies with promotion and relegation.

It is vital to appreciate the inherent uncertainty of outcome in sporting contests and to differentiate between performance and outcome. Performance refers to the “controllables,” the quantity and quality of the playing contributions by individual players. Outcome refers to the match result, which depends on the performances of the two competing teams as well as other factors such as the decisions of the match officials and weather conditions. From the perspective of any individual team, its own performances can only ever partially influence the match outcomes, so in reviewing games it is crucial to focus on how the team’s performance affected the result, abstracting from those factors that are beyond the team’s control. Performance ultimately comprises decision making and technique. It is about players selecting the best

option in and out of possession and then executing that decision correctly. The role of the coaching staff is to facilitate improvement in team performance by working with players to improve their decision making and their technique, and as a result, increase the likelihood of winning. This was a key element in the organizational culture established by Venter at Saracens. There was an emphasis on learning from the evidence of game experiences, particularly taking collective responsibility for the controllables, both the positives and negatives, that affected match outcomes. It was this attitude of mind that created an openness to the role of statistical analysis in informing coaching decisions.

2. Observation

Observation always involves filtering reality. What we observe is always framed by our preconceptions of what is important to observe. We filter out what we consider to be irrelevant, often subconsciously. Our frames of reference represent a tacit dimension of knowledge that should be subjected to critical appraisal. Hence, in designing any performance management system, a crucial starting point is for the coaching staff to describe in detail the perfect performance. How would they envisage the team playing if the game plan is implemented effectively? When the coaches describe the perfect performance, they are making explicit their expert criteria for evaluating team and player performance and this, in turn, provides the basis for identifying a comprehensive set of critical success factors to be observed and systematically recorded. It is important to observe the whole game and not just focus on selected critical incidents. This was a key feature of the internal data collection system at Saracens. The coaches recorded their observations on all plays, not just those plays deemed to be critical. Focusing only on selected events can seriously bias the overall evaluation of team and player performance, over-emphasizing some aspects of play while largely ignoring other contributions.

3. Data

Performance data constitute the categorization and measurement of observed performance. Performance data need not be numerical in form. Textual commentary on observed performance constitutes data that are amenable to analysis. At Saracens the spreadsheets that the coaches completed on the aspects of play for which they were responsible included a final column for written comments. I often found the analysis of these comments to be very revealing. For example, when a particular play was rated as a negative outcome, I would look for patterns in the coach’s comments such as the frequency with which specific reasons were cited by the coach for the negative outcome. This could give very clear direction on how to improve performance in this area of play.

The discussion of the value of the coach’s comments on performance points towards a key distinction in the types

of performance data available to elite sports teams, namely, generic data and expert team-specific data. Generic performance data refers to the data provided by third-party commercial suppliers using a set of generic definitions of match events. This data is largely tally (i.e., frequency) data on the number of instances of a particular type of action by individual players but can include further details on the action including time, pitch location, and outcome. In contrast, expert, team-specific performance data are generated by teams themselves using the team's own definitions and can involve expert (i.e., coach) assessments of the players' decision making and technique. This type of performance data requires expert knowledge of the team's game plan in order to be able to determine whether or not in any given game situation the player made the expected decision. It also requires expert knowledge to determine whether or not the player exhibited good technique. It is the expert, team-specific data on decision making and technique that provides the real depth of understanding on team and player performance.

As data analyst at Saracens, I enjoyed access to both types of data. Initially my work focused on reviewing match performances by analyzing the internal data that the coaches and video performance analyst produced on player performance in each game. This data included tally counts of the different types of contributions by players using internal definitions. There were also data on decision making and technique, usually in binary form with a good decision or good technique scored as +1 and a poor decision or poor technique scored as -1. This allowed the calculation of ratings for different types of decisions and techniques both for individual players and for the team as a whole.

Subsequently, at the request of the coaches, I produced opposition analysis to contribute to the development of specific game plans for individual games. This type of analysis required the use of third-party commercial data produced by a specialist sports data company that is centrally contracted by the Premiership to provide performance data to all of the member teams. Teams receive summary spreadsheets on each aspect of every game containing mainly tally counts of different types of player actions, including a breakdown by time period, pitch location, and outcome. For example, data are provided on the different types of tackles made by every player with the number of attempted tackles of each type further broken down into completed tackles and missed tackles. In addition, teams also receive the full event sheet for every game, usually comprising around 1,600 rows of data covering every player action recorded and detailing the player, time, pitch location using x, y coordinates, action description, and outcome. The generic tally count data provided more of an analytical challenge to tease out the strengths and weaknesses of opponents with the ultimate objective of gaining an understanding of their game plan by identifying the common patterns in their play. The problem is the reverse of that when faced with reviewing a team's performances where

the team's game plan is the starting point and the objective of the analysis is to determine how well or otherwise it has been implemented.

4. Analysis

A primary task of performance analytics is to analyze the variation in performance across games. Data analysts always face a signal-extraction problem. Performance data contain a mass of complex, seemingly chaotic information, which the analyst must decompose into systematic variation (i.e., signal) and random variation (i.e., noise). It is the systematic variation in performance on which the coaches must focus. Statistical analysis provides a set of tools for deriving valid conclusions under conditions of uncertainty. There are three broad types of statistical tools. First, statistics facilitates the basic exploration of data by summarizing the main characteristics of the data using data visualization and descriptive statistics. Second, statistics provides the tools to decompose complexity into constituent processes and to resolve the signal-extraction problem by differentiating between systematic and random variation. Third, statistics has developed a wide range of techniques to investigate associations and identify relationships between variables. Performance analytics is a forensic process of investigation, using statistical tools to try to explain why team and player performances vary across games.

5. Reporting

Effective analysis is a necessary prerequisite for effective reporting. By effective reporting, I mean reporting only those results that have practical significance for coaching decisions. Analysts must avoid the "kitchen-sink" approach of reporting everything in the vague hope that some of the numbers reported may prove interesting and even useful to the coaches. The kitchen-sink approach is the surest way of undermining the coach-analyst relationship. With the amount of performance data available and the development of database systems with automated analysis and reporting facilities, it is just too easy to produce extensive reports that overwhelm the coach. The analyst must filter out the irrelevant and report what is really important. The analyst must report the key performance indicators (KPIs) that have been identified and agreed upon by the coaching staff.

The game report template I developed at Saracens followed a general-to-specific structure, starting with an overall summary of the team performance based on the KPIs and then tunneling down into the specifics of the different aspects of the performance. The first page of the report contained a single table reporting the KPIs agreed upon by the coaches. There were around 25 KPIs reported. The KPIs associated with the same aspect of play were grouped together. I developed a traffic-lights system with performance levels for each KPI classified as excellent (green), satisfactory (amber), and

poor (red). The thresholds were agreed upon by the coaches based on a combination of statistical analysis of win-probabilities and the expert judgment of the coaches. I found it good practice to report the KPIs of not only the game under review but also the previous two games as well as the season averages. This provided context for the game under review and allowed coaches to see any emerging common patterns in recent performances. The rest of the game report provided more detailed analysis of specific aspects of the game and contained the graphs and tables of statistics that individual coaches required for their own areas of responsibility. I concluded the report with my own commentary that summarized the key aspects of the performance as well as including any more detailed analysis that I considered relevant for that particular game.

6. Intervention

To be effective, the process of data analytics must lead to actionable recommendations to the coaches to facilitate improvements in team and player performance. Training and preparation time during the season is a very scarce resource and must be allocated optimally. It is, therefore, vital to prioritize which aspects of play need to be worked on in training. An effective performance management system should be rule-bound in the sense of providing criteria based on analysis to determine when interventions are required and, when possible, indications of the best form of intervention. Tracking the KPIs should provide an early-warning system to indicate an increasing likelihood of a systematic deterioration in a particular aspect of the team's performances. Rule-bound interventions will help avoid "tampering," which is defined as interventions based on misinterpreting random variation as systematic variation.

The experience of operating performance (or quality) management systems in other sectors using statistical process control shows that unwarranted interventions as a response to random variation tend to increase the variability in performance. So not only does tampering waste scarce training time, it can also be counterproductive and undermine future performances. I am reminded of an incident in my first full season at Saracens when the game report for a particularly convincing victory showed one of the KPIs to be unusually low. Other than classifying it as poor and color-coding it red, I had not attached much significance to this low KPI in the game report since it was an area of strength and there was no indication in previous games of this being a potential cause for concern. Statistically it looked likely to be just a one-off anomaly. Unbeknownst to me, however, the coaches allocated additional training time to this particular aspect of play in the following week and in the next game, which was a critical must-win game in pursuit of the league title, sure enough the KPI in question was rated green, reflecting the benefit of the extra attention. However, the overall team performance

was below par, with Saracens winning but only just in a very tight contest. When I subsequently learned about the decisions on training priorities that resulted from the previous week's game report, I was left wondering if statistical analysis had nearly cost Saracens their first league title. After that experience I was always very mindful of making it clear when a red KPI should be treated as a cause for concern requiring intervention and when it should be treated as anomalous and just monitored for the time being.

Looking to the Future

Despite the explosive growth in the capability to collect and analyze performance data in elite team sports, particularly in the invasion-territorial team sports, the development of analytics-based performance management systems remains in its infancy. Video, rather than data, analysis remains the preferred methodology for most elite coaches to review their own team's performances and investigate the strengths and weaknesses of opponents. As my experiences showed, data analytics will only become an effective support system for coaches if it is embedded in a strong cultural and leadership commitment to evidence-based practice. Further, and crucially, data analytics must be coach-led, motivated by the primary objective of producing relevant analysis to inform coaching decisions and incorporating the expertise and experience of the coaches in identifying the critical information to be collected and analyzed.

Once the analysis of tactical performance data is more widely embraced by coaches, the next challenge is to merge the analysis of tactical performance data with the physical performance data on distance covered and speed. In turn, the tactical and physical performance data from games needs to be merged with training data and the other physical and well-being data collected on players. Analyzing these merged datasets could produce better guidance on personalized training and recovery programs to meet the specific needs of individual players. Personalized training and recovery programs would be better able to optimize the game performance of individual players and minimize their risk of injury, particularly those injuries in which excessive training workloads have been a contributing factor. The most data-savvy teams, those that Davenport and Harris (2007) would designate as analytical competitors, are already investing significant analytical resources to injury prevention to gain a competitive advantage, well aware of the enormous potential returns from analytics-based injury prevention programs that can reduce the salary expenditure wasted by players being unavailable to play because of injury.

References

- Alamar, B. C. (2013). *Sports analytics: A guide for coaches, managers and other decision makers*. New York, NY: Columbia University Press.
- Davenport, T. H., & Harris, J. G. (2007). *Competing on analytics: The new science of winning*. Boston, MA: Harvard Business School Press.
- Dawes, R. M. (1988). *Rational choice in an uncertain world*. San Diego, CA: Harcourt Brace Jovanovich.
- Gerrard, B. (2007). Is the *Moneyball* approach transferable to complex invasion team sports? *International Journal of Sport Finance*, 2, 214-230.
- Hakes, J. K., & Sauer, R. D. (2006). An economic evaluation of the *Moneyball* hypothesis. *Journal of Economic Perspectives*, 20, 173-185.
- Kahneman, D. (2012). *Thinking, fast and slow*. London, UK: Penguin Books.
- Lewis, M. (2003). *Moneyball: The art of winning an unfair game*. New York, NY: Norton.
- Pfeffer, J., & Sutton, R. I. (2006). Evidence-based management. *Harvard Business Review*, 84, 62-74.
- Scully, G. W. (1974). Pay and performance in Major League Baseball. *American Economic Review*, 64, 915-930.
- Schwartz, A. (2004). *The numbers game: Baseball's lifelong fascination with statistics*. New York, NY: St Martin's Press.

A Forecast for the Mainstreaming of Environmental Sustainability

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By their very nature, public assembly facilities (PAFs) and the events hosted within them attract large numbers of visitors, who are often treated to state-of-the-art performances and exhibits while being offered an exceptional array of amenities. Of course, these offerings can come with considerable costs, including those borne by the host and, central to this review, the environment. Increasingly, industry leaders are exploring strategies aimed at reducing the environmental impacts of their facilities, events, and services—strategies that can often result in reductions of both types of cost. In the past two decades, many organizations have incorporated pro-environmental initiatives into their corporate identity and practices, yet the sport and entertainment industry as a whole has been slower to adopt and implement large-scale sustainability mandates (e.g., Kellison & Hong, 2015). Furthermore, a 2013 report by *MIT Sloan Management Review* found that only 3% of media and entertainment companies “fully engage” with environmental issues (Kiron, Kruschwitz, Rubel, Reeves, & Fuisz-Kehrbach, 2013).

The reasons behind the industry’s somewhat sluggish rate of adopting pro-environmental practices are well documented in the literature. Perhaps the biggest reason relates to the question of whether eco-friendly technology exists and can be scaled to meet the demands of a large event or PAF, something that came up in interviews our research team conducted with lead stadium architects all around the world (Kellison & Hong, 2015). Of course, costs and benefits—sometimes real, sometimes imagined—play decisive roles (Kellison, 2015). And ultimately, proponents must find environmental allies among the organization’s chief decision-makers (Nguyen, Trendafilova, & Pfahl, 2014). Post-implementation, an organization must work to maximize an initiative’s positive impact on the business’ so-called triple bottom line (i.e., the economic, environmental, and social benefits; Kellison

& Kim, 2014). In light of the need for continued evaluation and improvement, organizations may form cross-functional “green teams” (Pfahl, Casper, Trendafilova, McCullough, & Nguyen, 2015), promote their initiatives to the public at large (Kellison & Mondello, 2012), and collaborate with other industry leaders to identify best practices (Pfahl, 2013). An organization’s ability to effectively assess its sustainable initiatives, however, may be limited if it is small, if the work environment rewards maintaining the status quo while stifling creativity, or if it lacks employees with the technical knowledge to measure environmental performance.

In response to the sometimes-glacial rate of adoption across the sport and entertainment industry, we have continued to work to identify the barriers, constraints, and challenges associated with the widespread adoption of pro-environmental initiatives. At the same time, industry trailblazers—still a relatively small number—continue to construct sustainable venues, design robust waste management plans, and promote eco-friendly practices to their audiences. In many ways, these facility managers, concert promoters, and team owners have worked to pioneer the environmental movement in sport and entertainment, demonstrating the possibilities (and highlighting the challenges) that exist in the industry. Therefore, rather than repeat the existing research by highlighting the constraints to green building and strategy-making, our goal in this review is to identify several promising signs that environmentally sustainable initiatives are becoming increasingly commonplace in the sport and entertainment industry. In the sections that follow, we focus on four indicators that are supporting the growth of sustainable practices in PAFs (e.g., sports stadiums, concert venues, performing arts theaters, convention centers) and their associated events (e.g., college and professional sport, live concerts and performances, public meetings and exhibits).

Growing Public Concern for the Environment

Though certainly not the first wave of environmentalism, the current environmental movement has coincided with ominous warnings from the scientific community and new technology aimed at reducing humans’ influence on the environment (McCullough, Pfahl, & Nguyen, in press). In a 2015 survey conducted by the Pew Research Center, global climate change was the most cited threat among the 40 nation-states included in the study (Carle, 2015). Americans and Europeans were outside the norm, instead identifying global terrorism and instability in the regions bordering Russia as the top threats. A second poll conducted by the Pew Research Center indicated “Americans’ views about whether the earth is warming have remained relatively stable in recent years” (68%; Kiley, 2015, para. 2). Still, the number of Americans who considered global warming to be a “very serious problem” increased to 46%, up from 33% in 2013.

As expected, contrasts—sometimes stark—existed based on political ideology, gender, race, age, and education.

Premised with the understanding that public concern for the environment is becoming more common, members of our research team predicted back in 2012 that organizational leaders (e.g., a team owner) could garner public support for a subsidized PAF by promoting a facility’s anticipated environmentally sustainable design (Kellison & Mondello, 2012). Since then, we have seen teams like the Atlanta Falcons heavily promote the greenness of their new \$1.4-billion stadium opening in 2017, but other teams have shown less enthusiasm for sustainable design (e.g., Atlanta Braves, whose SunTrust Park is also scheduled to open in 2017). Given many organizations’ reliance on public funding for their PAFs, Grant (2014) argued that citizens and elected officials could even require that new PAFs meet environmental benchmarks before receiving public subsidies. While this concept has been used in a number of municipalities, in other places, it has been met with resistance: policymakers in several cities, counties, and states in the US have proposed (and in some cases, passed) legislation banning specific pro-environmental certification systems for government buildings (Badger, 2013).

Industry responses to increased environmental consciousness among the public is not limited to PAF construction or renovation. Research from our team suggests that inside the stadium, theater, or museum, the demand for green products and services is increasing, and sport and entertainment organizations are engaging more deeply in socially responsible initiatives such as recycling and educational programs (McCullough, 2013; McCullough & Cunningham, 2011). Interestingly, research by Casper, Pfahl, and McCullough (2014) found that a majority of college football fans surveyed indicated their *expectation* that the athletic department would engage in pro-environmental practices and educational initiatives. In other words, highly visible organizations that lacked strategies aimed at reducing their environmental impact could be viewed negatively.

The influx of new “eco-friendly” products and services is undoubtedly a response to consumers’ increasing cognizance of environmental issues. Still, the simple adoption of a pro-environmental strategy is not without challenges. For example, when renovating historic PAFs such as theaters and monumental buildings, designers must strike a balance between improving efficiency and retaining the buildings’ architectural heritage (Maahsen-Milan & Simonetti, 2011). Additionally, the growth in environmental causes has come with some level of distrust from a skeptical public (e.g., those concerned about greenwashing and the perceived illegitimacy of corporate social responsibility initiatives). For instance, U2, fronted by oft-outspoken Bono, received so much criticism regarding the environmental impact of their U2 360° international stadium tour that they announced they were purchasing credits to offset the tour’s carbon emissions, a

plan met with further pushback from some environmentalists (Michaels, 2009).

To avoid charges of greenwashing, organizations and the initiatives they are promoting must appear credible and legitimate (Kellison & Mondello, 2012). One way organizations in the sport and entertainment industry have worked to project such sincerity is by engaging in social programming aimed at educating their audiences and inspiring behavior change, a fact we uncovered from our interviews with designers of several major sports stadiums, including those built for the Olympic and Paralympic Games and FIFA World Cup (Kellison, Trendafilova, & McCullough, 2015). For instance, Abbasi and Ansari (2015) explored how the set designs of children's television shows could be used to promote sustainability. Elsewhere, Inoue and Kent (2012a) looked at how sports teams could leverage their popularity to induce positive social change among their fans. The researchers found that when teams highlighted their pro-environmental practices, consumers indicated support for the team as well as the intention to engage in pro-environmental behaviors like recycling plastic and paper at home and buying recycled paper and plastic products. Naturally, in order for these programs to be effective inducers of behavior change, the organizations promoting these environmental initiatives must be deemed credible themselves. Citing earlier work by Yoshida and James (2010), Inoue and Kent (2012b) noted that consumers often consider an organization to be credible based on judgments of the product (e.g., sporting events, performances, exhibits) and associated services. Thus, by employing legitimate pro-environmental strategies aimed at an increasingly receptive public, sport and entertainment organizations may grow their existing support while attracting new fans from the community at large. This possibility is discussed in further detail below.

A More Comprehensive Understanding of Costs and Benefits

The pronounced public visibility of organizations in the sport and entertainment industry means that any decisions made or strategies implemented are subject to scrutiny from a wide range of stakeholders. When it comes to designing an eco-friendly PAF, key stakeholders include decision-makers (i.e., ownership or university representatives) and their consultants (i.e., architects and urban planners). Other groups are particularly persuasive as well, including existing consumers and ordinary citizens, political leaders, management companies, industry partners and corporate sponsors, and influential talent (e.g., a PAF's primary tenant, a headlining performer; Kellison & Hong, 2015). Outside the industry, only the most popular corporate brands face a similar degree of scrutiny. The effort to satisfy both internal and external

stakeholders can be especially challenging considering the sometimes-contradictory objectives of each group.

Before public awareness of environmental issues was linked to consumer behavior, sport and entertainment managers assessed the costs and benefits of implementing environmental initiatives in a more straightforward way. For example, upgrading a ballpark's lighting system could be justified if electricity savings exceeded the cost of installation (especially if the savings could be realized in a relatively short period of time). Replacing plastic dinnerware with compostable material might be more problematic, as the financial benefit of such a change would likely be minimal (though the environmental impact would be considerable).

Green Initiatives Remain Behind the Scenes

by Tim Kellison

Every year during winter break, I travel north to visit my family. As part of my trip, I catch a hockey game featuring the Pittsburgh Penguins, my favorite sports team since I was five years old. The Penguins play at the CONSOL Energy Center, a \$321-million arena designed by Populous that opened in Pittsburgh's Lower Hill District in 2010. Although I have a strong sense of nostalgia for the Civic Arena, the Penguins' old home that was razed as part of the new arena development, the CONSOL Energy Center is an improvement in nearly every way, and especially in its environmental design. It was the first NHL arena to earn LEED Gold certification, a fact that is largely absent from fans' minds as they watch the Penguins. Even for someone who studies sustainable design in sport, I have trouble identifying indicators that the CONSOL Energy Center was designed with the environment in mind—a small plaque at one of the arena's entrances and a few lines in the game program are about the only signs the facility is LEED certified. While in this review, Brian McCullough and I emphasize the marketing opportunities that accompany a sustainable facility or event, it would be shortsighted to not acknowledge the environment in all of this discussion. Physical markers like wind turbines, solar arrays, and living walls symbolize an organization's pro-environmental commitment, but the CONSOL Energy Center's lack of green ornamentation illustrates where environmental sustainability occurs: largely behind the scenes, where things like site selection and transportation planning, energy and lighting systems, and waste management procedures function without fanfare—just as designed. Once thought of as costly and disruptive measures to satisfy a niche market, sustainable design is now more accurately understood as a system that increases efficiency while complementing the spectator experience.

With environmental-conscientious consumers becoming more ubiquitous, however, managers today may also consider other benefits of implementing a pro-environmental initiative, including increased competitive advantage, goodwill perceptions among consumers, and increased fan identification (McCullough & Cunningham, 2010).

To exploit the attraction consumers may form with an environmentally conscientious organization, managers can no longer settle with the mere implementation of a green initiative. Indeed, creating awareness around these initiatives is equally important (at least from a financial maximizing perspective). A few years ago, members of our research team reached out to front-office executives of every North American team playing in a facility recognized by the U.S. Green Building Council as a LEED-certified (Leadership in Energy and Environmental Design) facility (there were only 13 at the time). Based on the testimony of teams like the Minnesota Twins and executives like Teddy Werner, Vice President of Business Development with the Milwaukee Brewers and a minority owner of the Milwaukee Bucks, we found that sports teams were showing greater awareness of their influence by engaging in social marketing to appeal to prospective consumers and motivate existing consumers. At the collegiate level, Walker (2013) observed a link between an athletic department's environmentally responsible practices and booster donations, providing further evidence that organizations that promote their environmental initiatives can reap additional financial benefits. As discussed previously, however, for highly visible sports teams, the fear that any announcement of their environmental initiatives could be met with public and media scrutiny means that teams must exercise caution about their eco-friendly claims. A National Hockey League executive interviewed for a study by Trendafilova, Babiak, and Heinze (2013) noted that the league erred on the side of caution rather than "[promoting] something that we could not deliver on...we [did] not want to be too bold" (p. 304). Other studies have explored the conflict that can occur between what a firm says it does and what it actually does. For example, Spector, Chard, Mallen, and Hyatt (2012) adapted an assessment tool to compare ski resorts' environmentally responsible actions and environmental communications; based on the compatibility (or incompatibility) between these two categories, a resort could be classified as reactive, proactive, inactive, or exploitative. While effective as a tool to identify greenwashing attempts, Spector et al.'s classification system could be used for self-assessment by organizations in all sectors of the sport and entertainment industry.

Increasing emphasis on sustainable technology has made pro-environmentalism accessible to organizations of all sizes. For example, a report by Reverb and the North American Concert Promoters Association offered a number of suggestions for how to make concerts and venues greener. Organized by scale, cost, and financial benefit, they include

attendee transportation, environmental education, energy efficiency, recycling, water conservation, and office greening (Reverb, 2011). Music festivals like Bonnaroo, GrassRoots, Outside Lands, Coachella, and Lollapalooza have rich histories promoting environmental initiatives around their events, and awareness of these programs has increased even more due to media reports and promoters' own outreach.

As we noted in the introduction, the initial success of a sustainable initiative depends on the individuals who formally approve or reject project proposals. Owners and associated executives have decision-making authority, so it takes an advocate in the front office to champion an environmental cause. Still, so much of an initiative's ultimate success rests with the managers who oversee implementation, evaluation, and, when necessary, modification. Based on Uecker-Mercado and Walker's (2012) interviews with managers and operations directors of environmentally responsible PAFs, buy-in from ownership is a prerequisite to establishing an environmental protocol, but it does not guarantee an initiative will be successful. Likewise, how best to maximize an organization's triple bottom line is not simply a problem for architects, facility operators, or promoters to solve. For these reasons, a growing number of organizations within the sport and entertainment industry have begun forming internal committees and external partnerships. We look more closely at these collaborative teams in the next section.

The Formation of Cross-Functional and Cross-Sector Teams

A comprehensive sustainability program requires the cooperation and mobilization of many different parts of an organization. For particularly small organizations and events with only a basic administrative staff (e.g., a traveling theater troupe, a regional band, an amateur sports tournament), collaboration with external partners may be necessary to assist with implementing an eco-friendly program. These collaborations are equally important for massive organizations. For example, during the fall of 2015, we interviewed the manager of a large university's Office of Sustainability. In describing his office's recycling program for football tailgaters, he identified a wide range of partners both inside and outside the university. These partners included student volunteers who distribute recycling bags to tailgating fans; fans who hopefully comply and dispose of their waste properly; vendors who utilize compostable and recycling packaging materials; the university's facilities department, which picks up the bags; and the regional waste management partner, which transports the waste offsite for sorting, composting, and recycling. Without any one of these partners, the program would be unsustainable.

Even in an organization with dedicated sustainability executives (such as a Director of Sustainability; Kurland & Zell,

2010), a cross-functional team is indispensable for ensuring that all parts of the organization adhere to environmental mandates (Pfahl, 2010; Pfahl et al., 2015). Furthermore, the complexity of many pro-environmental initiatives requires the recruitment of a wide range of professionals, including ownership, engineers, facility and operations managers, marketers, public relations officers, and waste management partners, often necessitating “long term partnerships with industry experts, particularly in the field of solid waste management and the development of energy and water-efficient technologies” (Trendafilova, McCullough, Pfahl, Nguyen, Casper, & Picariello, 2014, p. 13).

Perhaps the most visible signal of increased collaboration across sport and entertainment is the formation and growth of industry-wide networks such as the Broadway Green Alliance and Green Sports Alliance (GSA), both of which formed in response to the need for dedicated training programs and opportunities for collaboration and information sharing among organizations. While networks such as the GSA serve as highly visible symbols of an industry’s commitment to the environment, it also provides its members with the chance to meet and discuss best (and worst) practices, to brainstorm, and to learn about new technology in the field. These networks are especially important when considering the fact “green teams” and “sustainability committees” are relatively modern organizational innovations, a fact we are examining in a research project currently being conducted. While environmental engineers have been working to design new sustainable technologies for decades, the chief sustainability officer in an organization’s top management team is a recent development. As discussed further below, in response to the expectation that such executives and teams will become commonplace, sport and entertainment educators have looked to expand curricula accordingly.

Greater Emphasis on Developing Specialists and Research Agendas

In 2010, Mallen and colleagues published a Delphi study of experts representing 16 major sports facilities in North America. As part of the study, experts were asked to predict the trends most likely to occur in 2015. Among the top 10 responses was the expectation that a new generation of young, environmentally friendly professionals would join the workforce and initiate positive change. Additionally, the experts were asked to identify the most important environmental-related skills needed among new industry professionals. These competencies included an understanding of the U.S. Green Building Council’s LEED certification system; practical experience; the ability to identify cost-effective measures that could reduce an organization’s environmental impact; and a comprehension of environmental sustainability and “the dependencies and interconnection with the multiple compo-

nents of a sport facility” (Mallen, Adams, Stevens, & Thompson, 2010, p. 378). Two years later, Casper and Pfahl (2012) echoed the call to increase implementation of environmental issues in sport management and recreation studies curricula.

Educator-training programs modeled after Northern Arizona University’s Ponderosa Project have provided communities of practice for instructors seeking to incorporate environmental sustainability topics into their courses. Additionally, course offerings in sustainability are becoming increasingly available across college campuses, as are certificate and degree programs. For example, at Seattle University in 2015, co-author McCullough launched a certificate program in Sport Sustainability Leadership, the very first of its kind (see <http://www.seattleu.edu/artsci/sport-sustainability>). Seattle University roots its curriculum in proven theoretical frameworks, demonstrated through empirical evidence and then exemplified through practical examples in the industry. Students who successfully complete the program will seek their LEED Associates certification, which is consistent with Mallen and colleagues’ (2010) counsel. Educational efforts, however, are not limited to college campuses; environmental awareness can be inspired through myriad media, including the arts (Clammer, 2014; Okvuran, 2014).

Admittedly, the sport and entertainment academy has been slow to respond to the environmental issues that have challenged the industry. Like the early industry leaders who adopted pro-environmental PAF designs, a few pioneering scholars have been researching the relationship between the environment and sport and entertainment for quite some time, particularly in the field of parks and recreation administration. The rest of us are working to catch up. Earlier this decade, Mallen, Stevens, and Adams (2011) conducted a content analysis of more than 4,500 academic articles published from 1987–2008 and found that research on environmental sustainability was, with few exceptions, absent from the literature. The authors concluded with a cautiously hopeful assessment:

An optimistic interpretation of the state of sport-ES research suggests that this area is in its infancy. It is hoped that this study will serve as a catalyst to encourage academicians in the field of sport to conduct research with an environmental focus. (Mallen et al., 2011, p. 253)

In the time since that article was published, research on environmental sustainability has appeared sporadically in the field’s most prominent journals and at scholarly meetings. Several books have been published to inform students, scholars, and practitioners. A number of new scholars have emerged and developed promising research agendas.

Despite advances in both scholarship and in the classroom, research on the topic remains relatively small. In Sotiriadou and Hill’s (2015) special issue on sustainable sport-

ing events, the editors provided an update to Mallen et al.'s (2011) analysis:

As it turns out, four years later, advancements in the field remain slow and a lot of questions linger unanswered. A lot of our understanding remains anecdotal ... and although the industry and practitioners move fast in adopting their [practice] to respond to [corporate social responsibility] demands or [triple bottom line] standards, empirical research and theoretical underpinnings that are required to support practice are lagging behind. (p. 7)

In other words, there is still much work to do.

The sport and entertainment industry can continue to develop environmentally sustainable initiatives without the direct aid of researchers. Still, like the need for a wide range of experts in a cross-sector work team, researchers can provide much-needed analytical support while an organization's personnel can focus on job-related tasks. For example, research on "green games" and zero-waste events has provided insight on the effectiveness (and limitations) of such programs when attempting to induce behavior change (e.g., Casper et al., 2014). Despite the strengths of these initiatives, which serve as interventions to engage and educate fans while highlighting sponsor and partnership relations, some have argued that communication strategies directed at one-time events are ineffective (Worrell & Reuter, 2014). Specifically, waste management campaigns are better served through sustained, regular, and short communications rather than through grandiose events like green games or zero-waste events.

Like other fields, collaboration between practitioners and academicians is always desired. With respect to sport and entertainment and the slow incorporation, as a whole, to address environmental sustainability issues, academicians can evaluate the ways in which organizations efficiently and effectively develop strategic plans and evaluative measures that are not only practical, but can also be seamlessly implemented. For instance, sport organizations and entertainment entities can begin to track their environmental impacts using a five-step process of (1) defining, (2) connecting stakeholders, (3) preparing, (4) reporting, and (5) monitoring. Understanding the response of various stakeholder groups—internal and external—should reflect both theoretical and data-driven endeavors. These steps are commonly overlooked, especially in the sport industry, thereby leading to an inefficient use of company resources (i.e., human and economic) to involve stakeholders in the organization's sustainability efforts.

Further, academicians can help sport and entertainment entities engage their customers or fans in proper ways to activate their environmental identities. For instance, an individual's environmental identity is not salient or activated when attending a sporting event because his/her fan identity is overpowering and fully activated. Academicians can

use theoretical foundations and experiments to properly leverage fan identification of spectators to promote and encourage sustainable behaviors during the event experience and the possible transfer to fans' everyday lives. Moreover, examining interventions using both pre- and post-testing will provide more fruitful results to the academy and practitioners alike (e.g., Cranz, Lindsay, Morhayim, & Lin, 2014). A deeper understanding of consumer segments can help sport and entertainment organizations tailor effective messaging and educational campaigns to their customer bases, increasing the return on investment for programs like waste management, transportation, and environmental education campaigns and initiatives.

Conclusion

This review provides a sometimes-gloomy, sometimes-hopeful analysis of the state of sustainability in sport and entertainment. The adoption rate of eco-friendly initiatives in the industry has been slow at times, research activity remains somewhat of an academic niche, and environmental issues only occasionally evoke a dramatic public response. On the other hand, existing executives are learning more about best practices while trainees are becoming better prepared to manage careers in sustainable strategy-making. Looking forward, several indicators suggest that environmental sustainability is on the precipice of becoming a mainstream issue in the sport and entertainment industry. Public concern for the environment has grown, organizational leaders are increasingly aware of how that concern can drive consumerism, communities of practice have formed within organizations and across the industry, and the academy is responding to business demands for environmental experts.

Much of the work highlighted in this review comes from the research partnerships we formed with industry leaders in sustainable sport and entertainment. Still a minority, these pioneers have been ahead of the game for more than a decade. For the vast majority of organizations that have yet to implement large-scale environmental initiatives, the discussion above should illustrate that sustainable design is as much a strategic imperative as it is an environmental issue. Simply put, pro-environmentalism is less risky, less costly, and more attractive than it used to be. It can spur new consumer interest in the local community and provide national media exposure (though it is becoming less newsworthy as LEED certification and zero-waste games become more common). In fact, we expect that as sustainability becomes a mainstream concept in the industry, organizations that fail to implement large-scale environmental measures will start to see backlash from activists, special interest groups, and ordinary citizens. Based on our review, practitioners lacking experience with or leadership support for sustainable initiatives have several options to effect change. When hiring

new executives, for example, employers should identify applicants who can demonstrate an understanding of the challenges and opportunities associated with sustainable design. Additionally, practitioners are encouraged to join (or form) cross-functional or cross-sector work teams to network, strategize, and gain knowledge. Finally, practitioners should reach out to the growing number of researchers with expertise in environmental management, many of whom are motivated to form mutually beneficial partnerships that, like the green strategies themselves, are good for the environment and good for business.

References

Abbasi, B., & Ansari, M. (2015). Ethical sustainability in scene design of Iranian children TV shows. *Asian Social Sciences*, 11(21), 39–54.

Badger, E. (2013, August 28). Why are some states trying to ban LEED green building standards. *Citylab*. Retrieved from <http://www.citylab.com/design/2013/08/why-are-some-states-trying-ban-leed-green-building-standards/6691/>

Carle, J. (2015). *Relatively few in U.S., Europe see climate change as a serious threat*. Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2015/09/25/relatively-few-in-u-s-europe-see-climate-change-as-a-serious-threat/>

Casper, J. M., & Pfahl, M. E. (2012). Environmental behavior frameworks of sport and recreation undergraduate students. *Sport Management Education Journal*, 6, 8–20.

Casper, J. M., Pfahl, M. E., & McCullough, B. P. (2014). Intercollegiate sport and the environment: Examining fan engagement based on athletics department sustainability efforts. *Journal of Issues in Intercollegiate Athletics*, 7, 65–91.

Clammer, J. (2014). Art and the arts of sustainability. *Social Alternatives*, 33(3), 65–70.

Cranz, G., Lindsay, G., Morhayim, L., & Lin, A. (2014). Communicating sustainability: A postoccupancy evaluation of the David Brower Center. *Environment and Behavior*, 46, 826–847.

Grant, T. J. (2014). Green monsters: Examining the environmental impact of sports facilities. *Villanova Environmental Law Journal*, 25, 149–176.

Inoue, Y., & Kent, A. (2012a). Investigating the role of corporate credibility in corporate social marketing: A case study of environmental initiatives by professional sport organizations. *Sport Management Review*, 15, 330–344.

Inoue, Y., & Kent, A. (2012b). Sport teams as promoters of pro-environmental behavior: An empirical study. *Journal of Sport Management*, 26, 417–432.

Kellison, T. B. (2015). Building sport's green houses: Issues in sustainable facility management. In J. Casper & M. E. Pfahl (Eds.), *Sport management and the natural environment: Theory and practice* (pp. 218–237). New York, NY: Routledge.

Kellison, T. B., & Hong, S. (2015). The adoption and diffusion of pro-environmental stadium design. *European Sport Management Quarterly*, 15, 249–269.

Kellison, T. B., & Kim, Y. K. (2014). Marketing pro-environmental venues in professional sport: Planting seeds of change among existing and prospective consumers. *Journal of Sport Management*, 28, 34–48.

Kellison, T. B., & Mondello, M. J. (2012). Organisational perception management in sport: The use of corporate pro-environmental behaviour for desired facility referenda outcomes. *Sport Management Review*, 15, 500–512.

Kellison, T. B., Trendafilova, S., & McCullough, B. P. (2015). Considering the social impact of sustainable stadium design. *International Journal of Event Management Research*, 10, 63–84.

Kiley, J. (2015). *Ideological divide over global warming as wide as ever*. Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2015/06/16/ideological-divide-over-global-warming-as-wide-as-ever/>

Kiron, D., Kruschwitz, N., Rubel, H., Reeves, M., & Fuisz-Kehrbach, S.-K. (2013, December). *Sustainability's next frontier*. Retrieved from <http://sloanreview.mit.edu/projects/sustainabilitys-next-frontier/>

Kurland, N. B., & Zell, D. (2010). The green in entertainment: A conversation. *Journal of Management Inquiry*, 19, 209–218.

Maahsen-Milan, A., & Simonetti, M. (2011). Auditoria and public halls. The preserved architectonic heritage, in the perspective of sustainability. *Procedia Engineering*, 21, 711–720.

Mallen, C., Adams, L. J., Stevens, J., & Thompson, L. (2010). Environmental sustainability in sport facility management: A Delphi study. *European Sport Management Quarterly*, 10, 367–389.

Mallen, C., Stevens, J., & Adams, L. J. (2011). A content analysis of environmental sustainability research in a sport-related journal sample. *Journal of Sport Management*, 25, 240–256.

McCullough, B. P. (2013). Identifying the influences on sport spectator recycling behaviours using the theory of planned behaviour. *International Journal of Sport Management and Marketing*, 14, 146–168.

McCullough, B. P., & Cunningham, G. B. (2010). A conceptual model to understand the impetus to engage in and the expected organizational outcomes of green initiatives. *Quest*, 62, 348–363.

McCullough, B. P., & Cunningham, G. B. (2011). Theory of planned behavior, recycling intentions, and youth baseball. *International Journal of Sport Management and Marketing*, 10(1/2), 104–120.

McCullough, B. P., Pfahl, M. E., & Nguyen, S. N. (in press). Green waves of environmentalism in sport. *Sport in Society: Cultures, Commerce, Media, Politics*.

Michaels, S. (2009, July 10). U2 criticized for world tour carbon footprint. *The Guardian*. Retrieved from <http://www.theguardian.com/music/2009/jul/10/u2-world-tour-carbon-footprint>

Nguyen, S. N., Trendafilova, S., & Pfahl, M. E. (2014). The nature-resource-based view of the firm (NRBV): Constraints and opportunities for a green team in professional sport. *International Journal of Sport Management*, 15, 485–517.

Okvuran, A. (2014). Sustainability in drama. *Creative Education*, 5, 1720–1724.

Pfahl, M. E. (2010). Strategic issues associated with the development of internal sustainability teams in sport and recreation organizations: A framework for action and sustainable environmental performance. *International Journal of Sport Management, Recreation and Tourism*, 6, 37–61.

Pfahl, M. E. (2013). The environmental awakening in sport. *Solutions*, 4(3), 67–76.

Pfahl, M. E., Casper, J. M., Trendafilova, S., McCullough, B. P., & Nguyen, S. N. (2015). Crossing boundaries: An examination of sustainability department and athletics department collaboration regarding environmental issues. *Communication & Sport*, 3, 27–56.

Reverb. (2011). *How to green your concerts without breaking the bank*. Retrieved from <http://www.reverb.org/project/NACPA/NACPAReport-FINAL.pdf>

Sotiriadou, P., & Hill, B. (2015). Raising environmental responsibility and sustainability for sport events: A systematic review. *International Journal of Event Management Research*, 10, 1–11.

Spector, S., Chard, C., Mallen, C., & Hyatt, C. (2012). Socially constructed environmental issues and sport: A content analysis of Ski Resort Environmental Communications. *Sport Management Review*, 15, 416–433.

Trendafilova, S., Babiak, K., & Heinze, K. (2013). Corporate social responsibility and environmental sustainability: Why professional sport is greening the playing field. *Sport Management Review*, 16, 298–313.

Trendafilova, S., McCullough, B. P., Pfahl, M. E., Nguyen, S. N., Casper, J. M., & Picariello, M. (2014). Environmental sustainability in sport:

- Current state and future trends. *Global Journal on Advances in Pure & Applied Sciences*, 3, 9–14.
- Uecker-Mercado, H., & Walker, M. (2012). The value of environmental social responsibility to facility managers: Revealing the perceptions and motives for adopting ESR. *Journal of Business Ethics*, 110, 269–284.
- Walker, M. (2013). Does green management matter for donation intentions? The influence of environmental consciousness and environmental importance. *Management Decision*, 51, 1716–1732.
- Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experience: Antecedents and consequences. *Journal of Sport Management*, 24, 338–361.

Sport for All: Events and Facilities as Facilitators to Lifelong Sport Involvement

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There are a number of positive assumptions held about sport and its ability to contribute to adults' lives. Sport, when intentionally programmed, is considered a valuable vehicle to accomplish a number of social, physical, and psychological outcomes (Coakley, 2011; Dionigi, 2005). With the right focused programming and/or planning, sport also has the potential to provide important economic and social impacts to the community (Butler & Aicher, 2015). With the tremendous growth of the sport travel industry, adults are seeking sport experiences that allow them to remain active and competitive sport participants (Newland & Aicher, 2015a, 2015b). Many cities and countries are recognizing the interest and benefit to the community, both economically and socially, with the development of policy and/or initiatives aimed at building active (or participant-focused) sport tourism (Gibson, 2003). Many cities and some states created sport commissions whose primary focus is to attract and/or bid on sport events in order to drive tourism. However, despite the growth of sport tourism related to sport participation, the access and opportunities for adult participants continue to remain inconsistent. While some sport organizations, facilities, event promoters, and parks and recreation departments recognized the critical role adult sport plays in their daily business practices, many do not realize the impact adult sport can have to their bottom line.

In this paper, I will explain why sport participation is important for adults and how sport event managers, sport organizations, and facilities can do more to improve access and opportunity while enhancing business practices. Furthermore, I will explain how the entertainment industry can

also contribute and benefit from involvement in adult sport. To discuss the topic, I will discuss my previous work as well as others' research while also providing direct examples of current practices in the industry as a means to provide potentially useful examples for business application.

Why is Sport Participation Critical for Adults?

Sport Contributes to Health, Fitness, and Well-Being

The United States and other industrialized nations are facing an obesity epidemic. Nearly 40% of men and 30% of women are overweight and 35% of men and nearly 37% of woman are obese (Yang & Colditz, 2015). Compounding the status of weight is the lack of physical activity. Nearly 49% of adults are not engaged in physical activity that elicits any health benefit and 23% reported no physical activity within the last 12 months (Hakell et al., 2007). With less than 25% of the population at or below normal weight and engaging in beneficial physical activity, it is vital adults remain physically active throughout their lifespan to improve the collective public health. Sport can provide an outlet for physical activity that not only engages the participant, but also offers a fun and social environment that promotes a healthy lifestyle with likeminded peers (Berg, Warner, & Das, 2014; Lim et al., 2011).

Sport is Not Kids' Play

An often-held position is that sport is for the young (Dionigi, 2005). However, as research suggests, adults are more likely to remain active when opportunities are present (Cardenas, Henderson, & Wilson, 2009). One reason given for the decline in sport participation with age involves the lack of facilities that provide older adults sport opportunities (Cerin, Leslie, Sugiyama, & Owen, 2010). Such information presents the questions: Are sport organizations and venues wrongly assuming that older people no longer want to participate? Or is there a perception that there is no demand? It is true that team sport participation declines with age in comparison to individual sports (Lim et al., 2011, Newland & Aicher, 2015a). For example, the infrastructure and programming changes connected to team sport opportunities declines as athletes transition out of highly competitive and elite levels of sport (Lim et al., 2011; Newland & Aicher, 2015a). Many athletes emphasized the lack of competitive opportunities available to them after college may be one reason for decreased sport participation (Newland & Aicher, 2015a).

The problem is not that athletes are less competitive or disinterested in sport participation. The problem is that the current sport system in the United States focuses resources, structures, and systems on the development of elite sport and not on mass participation. Youth development becomes an

investment in future talent, and therefore, programming and infrastructure is geared more toward the younger generation of athletes. Those involved in sport are so focused on the elite angle, they fail to realize that there are more participants willing and eager to participate—and are just as competitive as their elite counterparts. So, what is an adult athlete to do? Many are forced to either “exercise” to get adequate physical activity, or try something new.

The lack of access and opportunity has led athletes to try different sports that do provide opportunities to remain physically active and competitive (Jacobs, Newland, & Green, 2012). For instance, many athletes transitioned into sports like triathlon and running, which can accommodate their need for competition and skill mastery as they age. A number of third-party organizations also recognized the commercial value of adult sport (especially in running and triathlon) and developed the necessary infrastructure to support growth (Newland & Kellett, 2012; Phillips & Newland, 2014). Other sports do provide continued programming, like soccer and basketball, but athletes complain that opportunities for serious competition are inconsistent (Jacobs, Newland, & Green, 2012; Newland & Aicher, 2015a). A growing population of aging athletes requires continued access and opportunity to physically demanding sport (Dionigi, 2002, 2006a, 2006b; Newland & Aicher, 2015a). With the rising trend of aging athletes seeking sport opportunities there is a great deal of opportunity that can enhance business practices for sport organizations, sport event promoters, and sport venues. These business applications include new revenue streams through events and programming, increased entertainment collaborations, and increased social, physical, and psychological benefits to consumers and employees.

Build it Right and They Will Come

Sport systems in the United States are failing adult participants. With the rise in obesity rates, health issues, and mortality/morbidity rates, the sport industry can and should be facilitating access and opportunity. By doing so, sport entities can benefit not only from new revenue streams, but they can also become an active contributor to improving the health of aging Americans. The following is a discussion as to how different actors in the sport industry can contribute to and benefit from the adult sport sector of the industry.

Event Promoters and Managers

The adult endurance sport event industry continues to grow as adults seek opportunities to stay active—running (from niche 5Ks like the color run to marathons), triathlon, and adventure races (e.g., Spartan Run, Tough Mudder, and Warrior Dash) dominate the summer race event calendar. While event promoters/managers are typically for-profit entities, these organizations provide a critical role in the development

and growth of a sport. For example, USA Triathlon (USAT) is the governing body for the sport of triathlon, which is tasked with the development and growth of the sport. However, given the organization's limited resources, USAT does not have the means or the interest in hosting events across the country. Therefore, the organization relies on myriad events hosted by third-party organizations that offer competitive athletes opportunities to race and develop their skills on a variety of courses across the country (Newland & Kellest, 2012; Phillips & Newland, 2014). Another example of a relatively young sport—from an adult, mass participation perspective—is mixed martial arts (MMA). For a nascent sport like MMA, which does not have a structured governing body to support development and growth, expansion of the sport falls to event promoters. In order for MMA to develop and grow, event promoters are necessary—they provide the access to competitive opportunities. However, many promoters, like the Ultimate Fighting Championship (UFC), do not care about nor want the responsibility of developing or growing the sport (Woolf, Berg, Newland, & Green, in press). Their concern is to host an exciting event, and they deliver. Yet, adults that have matriculated into the sport at a later age have limited opportunities to try fighting competitively, as the UFC is not really concerned with the lower ranks of fighters. Fighting clubs have begun to offer adult classes in the various disciplines (e.g., kickboxing, jujitsu, wrestling), but since few events are organized at low (non-spectator) levels, there are few opportunities for novice and intermediate fighters to break into the sport to experience a competitive bout. Whether event promoters or managers realize it or not, the events these entities and individuals develop and host do contribute directly to the access adults have to sport opportunities, and many sport organizations could do more to encourage participation among their client base, through the organization of more (lower-level) sport events (Phillips & Newland, 2014).

Event promoters and managers can also benefit from the surge in active sport tourism over the last decade. As one of the largest and fastest-growing segments of the tourism industry, active sport tourism is becoming highly recognized and valued by governments and municipalities seeking to attract large sporting events to their community (Hritz & Ross, 2010). Athletes are actively seeking opportunities to race domestically and abroad (Newland & Aicher, 2015b) and that demand has been met by third-party organizations, like the World Triathlon Group, that has expanded the 5150, 70.3, and 140.6 distance triathlon races across the world (Ironman, 2015). Similarly, the adventure race event Tough Mudder, “a team-oriented 10-12 mile obstacle course designed to test physical strength and mental grit,” has also expanded into international markets due to its rise in popularity among adult participants (Tough Mudder, 2015). Other events, like the reputable Flying Pig marathon in Cincinnati, Ohio, have extended the stay of competitors over the event weekend by

including a Beer Series, a 5K, and a half marathon on Saturday, in addition to the famous marathon on Sunday. With 36,000+ total participants (event participants and volunteers) over the event weekend, the Flying Pig reports an economic impact of \$12 million to Cincinnati (Flying Pig Marathon, 2015), contributed directly by the sport tourists attending the various events.

Additionally, sport event promoters and managers can seek support and partnerships from local sport commissions and other government tourism agencies interested in attracting new tourists to the area. These active sport tourists could be highly attractive to destinations, as endurance athletes (e.g., cyclists, runners, and triathletes) tend to be highly educated, upper-middle class, and willing to travel domestically and internationally for events that offer opportunities to explore the destination and relax (Newland & Aicher, 2015b). The athletes who travel for sport events also tend to consider themselves highly skilled and competitive and are interested in challenging and reputable events—especially triathletes and cyclists (Newland & Aicher, 2015b). As Gibson, Attle, and Yiannakis (1998) illustrated nearly 20 years ago, a great deal of adults are choosing sport-oriented vacations—across the lifespan, including middle to late adulthood. Why these athletes travel is important, but event managers should also consider what drives athletes to participate (Aicher & Newland, 2015; Newland & Aicher, 2015b; Rundio, Heere, & Newland, 2014) and how this is impacted by subculture (Green & Chalip, 1998; Wheaton, 2004).

Understanding the needs and wants of an older generation that aspires to continue their engagement in sport is crucial. Event promoters and managers who understand the desires of adult athletes can develop events that meet these needs while also creating new revenue streams for the sport event entity or individual (Aicher & Newland, 2015). One example is how unique partnerships can be formed with sport venues to provide sport opportunities that differentiate the event from the competition (Newland, 2015b). For example, the Delaware Charity Challenge (DCC) is an event promoter that hosts sporting events to support the fundraising efforts of local charities in Delaware (DCC, 2015). The DCC and the Chase Center, a convention venue in Wilmington, Delaware, recently aligned to host a new winter triathlon in January 2016. The winter triathlon allows athletes to compete in teams of 2-3 people (all male, all female, or co-ed) or as individuals. To participate, the athlete rows on an ergometer, bikes on a spin bike, and runs on a treadmill to accumulate distance within a specified time frame on each piece of equipment. The athlete, or team, that logs the farthest distance wins the indoor race. Because the bitter cold temperatures and inclement weather in January typically threaten successful events in Delaware, the Chase Center saw an opportunity to combat seasonality with this event. The inclement weather also tends to keep athletes indoors unable to compete, so the indoor triathlon not only provides

revenue to the Chase Center in a historically slow month, it also provides competitive opportunities for athletes to enjoy in the off-season.

Sport Organizations

The aforementioned decline in team sport participation with age is often attributed to time and family constraints, fear of participation, physical weakness and/or injury, and again, the lack of access to facilities and opportunities to play (Dixon, 2009; Iso-Ahola et al., 1994; Lim et al., 2011; Newland & Aicher, 2015a). Positively, there is opportunity for sport organizations to facilitate team sport participation by offering varied skilled leagues, coaching classes or camps, and private training. Finding ways to offer adult sport participants competitive outlets is also key to continuous participation. In Colorado, the CO Parks and Recreation Association (CPRA) developed the CO Association of Recreational Athletics (CARA) for adult (and youth) sport participation. CARA provides competitive opportunities for a range of sports and teams to compete against other CPRA locations that participate in CARA (CPRA-web.org, 2015).

Another growing segment of the recreational sport industry is sport and social leagues (SSL). A number of studies show that individuals engage in sport because of the benefits of social interaction and hedonism (Berg et al., 2014; Cardenas, 2009; Lim et al., 2011; Aicher & Newland, 2015). These two key benefits are exactly what the sport and social clubs offer. For example, a very successful SSL, the Austin Sport and Social Club (ASSC) in Texas, targets professionals aged 21-35 by offering opportunities for like-minded sport participants to engage socially through sport. There are typically two levels of play, competitive and social, and a wide range of sports such as softball, flag football, soccer, volleyball, dodgeball, and kickball. In addition to three distinct sport seasons, the ASSC also hosts social events like weekly happy hours, New Years Eve parties, summer barge parties, and other events where the young professionals can interact outside of sport. The ASSC expanded its services throughout Texas, offering programs in Dallas and San Antonio. Nearly all states now offer similar programming, like the Delaware Sport League and Philadelphia Sport and Social Club, which offer adults opportunities to play and engage with other athletes socially.

With the growth of the adult sport event and tourism industry, especially for endurance sports, sport organizations can also contribute to this sector by offering special training classes, clinics, and camps with specialized coaches. My research shows that many adult athletes switched to a new sport in adulthood and have not yet mastered the skills necessary to compete (Jacobs et al., 2012, Newland & Aicher, 2015). For example, many novice triathletes claimed they played other sports in their youth (like soccer or softball) and “found” the sport of triathlon later in life, which required swim-

ming lessons or learning how to train properly for running and biking (Jacobs et al., 2012; Newland & Aicher, 2015a). In triathlon specifically, third-party organizations noticed this gap and have begun to offer clinics and camps in the sport's off-season so athletes can improve skills (Phillips & Newland, 2014). For facilities that possess swimming pools, tracks, and/or cross country space, providing programming that meets the needs of athletes joining the sport can provide new revenue streams. Other adult athletes learned an entirely new sport because of its recent popularity, and sport organizations have responded to this interest. As I discussed earlier, while the event promoters have not engaged in the development of MMA, many fighting clubs expanded their services to include programs for adults who are interested in learning about the sport, but are not interested in actually fighting competitively (Woolf et al., in press). Adults can take specialty classes like jujitsu, kickboxing, or self-defense from the actual competitive fighters in the gym who are serving as coaches and personal trainers. What is unique about the MMA subculture is that athletes are often “peer coached” rather than learning in a traditional coach-athlete structure. Novice or intermediate participants learn from the elite athletes that also train at that fight club, which not only tightens the community and supports inclusion, but also helps socialize newcomers into the subculture of the sport. But perhaps most importantly, the fight club managers and owners benefit financially from the classes and training sessions that serve to generate new revenue streams for the club (Woolf et al., in press).

Sport Facilities

Facilities can capture new income by attracting consistent events—and these do not have to be traditional sport events like tournaments and/or adult sport programming such as leagues. Consider how a facility like Citizen Bank Park (home of the Philadelphia Phillies) capitalized on adult sport events. The Spartan Race is a timed adult sport event that incorporates running and obstacles. In most cases, the event is held in an open space, such as a city or county park. However, the organizers of the Spartan Race had a vision for how the baseball park could be used in the off-season and still offer a challenging event. Athletes wound their way through Citizens Bank Park by climbing the stadium stairs (including the upper decks), darted up the ramps, and sprinted across the field and the surrounding parking lots—all while completing obstacles. Competitors raced from obstacle to obstacle as they complete the course. This event is a unique way Citizens Bank Park capitalized on a niche phenomenon, which enabled the venue to generate income in the off-season while providing a unique opportunity for adults to stay active.

A recent sport facility concept by the visionary Bill Scott is the Tri Habitat, LLC, which will be a completely closed-course triathlon facility on 1,110 acres of land on the coast

of Wilmington, North Carolina. This facility, far ahead of its time, will boast of a pristine 1,100-meter swim course in a specially designed horseshoe lake, a 14-mile bike course, and a 6.2-mile run course. But, that is not all. The concept also includes built-in stadium seating at prime locations along the course (perfect for spectating a sport that is notoriously difficult to spectate), a lodge and conference center, a pavilion and stage, and specific locations especially equipped to host triathlon events (Tri Habitat, 2015). This facility will serve the adult triathlon community by providing training and racing opportunities while also having the capacity to host other outside events, if necessary. For example, the TriHabitat amphitheater is designed to accommodate pre-race or event meetings and briefings, post-race award ceremonies, and other events like concerts. Likewise, the lodge will contain 20 rooms, a bistro, a kitchen, and a conference center, which can host small meetings and conferences.

As stated above, organizations can capture new income through the development of adult sport programming. Evidence indicates that athletes are seeking competitive sport opportunities that not only allow them to hone and master new skills, but also to provide opportunities for social interaction and support (Aicher & Newland, 2015; Lim et al., 2011; Newland & Aicher, 2015a). In some cases, the facility might have the physical resource (e.g., a pool or track), but do not have adequate human resources (e.g., experienced coaches) to provide the sport programming. In this case, it would be wise for the facility to reach out and partner with local sport clubs and groups, like triathlon training groups or swimming clubs, that require the facility to train. The club/group could pay a user fee and fill the facility during slow or off-season periods. With creative thinking, the facility could create new revenue streams by attracting unique or niche events and offering physical resources to outside groups. For example, to combat a decline in participation and bring new participants to the game, the golf industry has developed creative new ways to engage with the sport. Big Hole Golf uses 15-inch holes rather than the traditional 4 ¼-inch hole to decrease the difficulty level and increase playing time. Another idea is FootGolf. Combining soccer and golf, FootGolf closely follows golf rules, but is played with a regulation soccer ball on a shortened golf course with 21-inch cups (American FootGolf League, 2015). With a reported 5 million golfers having left the game in the past decade, many in the industry are taking a calculated risk that these new ideas will attract new players interested in fun, faster play (Chase, 2014).

Arts and Entertainment Industry

The anthropological research conducted on events illustrates how their celebratory environment engenders social interaction and a sense of community (Chalip, 2006). Events that offer opportunities for athletes to socialize can strengthen the overall participation experience and meaning they attach

to the event (Newland, 2015b). The Rock n' Roll Marathon Series is a great example of how sport and music formed a partnership to create a fun environment that celebrates both runners and musicians. What started as a running event with bands along the run course, merely meant to entertain the runners and create a fun atmosphere, has grown into a full weekend festival packed with events, running, and a health and fitness expo. The weekend concludes with a finish line concert featuring some of the biggest names in music (Rock 'n' Roll Marathon, 2015). According to the Rock 'n' Roll Marathon Series website, more athletes participate in their running series than any other in the United States. And why? They claim it is because the festival environment makes running in their events more enjoyable.

As a means to enhance the overall sport experience, sport events have also begun to include culture and arts as part of the event. Since the late 1990s, the International Olympic Committee (IOC) has required that future candidates include a plan for the inclusion of culture and arts as part of the bid process. Within the bid, the organizing committee must also demonstrate how international artists from entertainment, dance, music, theater, and the arts will be incorporated into the host culture and celebrated leading up to the Games (IOC, 2015). Given the diversity of sport events, especially those like the Olympic Games, the importance of sharing culture and tradition has grown as a means to build a sense of community and engender opportunities for social interaction (Chalip, 2006).

Given that many athletes not only travel to participate in the event, but also to explore the destination (Newland & Aicher, 2015b), it would behoove the event and destination to incorporate the local culture and arts. For example, Memphis in May is a month-long festival complete with music, barbecue, and one of the most popular running events in the country. Event goers can enjoy the Beale Street Music Festival, the World Championship Barbeque Cooking Contest, and the Great American River Run, which includes the half marathon and 5k distances (Memphis in May, 2015). According to the Memphis in May website, they are a community-based organization whose events generate more than \$70 million in economic impact, develop diversity and cultural pluralism, and produce extensive educational and economic programs for the city. There is great synergy among sport and the arts that should be explored to foster community and business relationships that not only offer economic and community benefits, but also improve the event experience for the attendee by engendering social interaction, diversity, civic pride, and community (Newland, 2015b).

Conclusion

There are a number of opportunities available to those interested in providing access and opportunity to adult sport

participants. With the growth of travel for active sport tourism, the boom of adult sport events, especially in the area of endurance sports, and the new opportunities to develop events and programming for adults, there a number of ways in which sport event and entertainment organizations can get involved. By developing niche events, expanding opportunities for sport tourism, and joining forces with local event promoters or sport organizations, facilities can capitalize on opportunities for new revenue-generating programs or events. Good professionals, like Bill Scott, who envisioned Tri Habitat and is hoping to revolutionize how triathletes train and compete, see potential for new opportunities, build partnerships, and are cognizant of the needs of the adult sport participants. There is big growth potential—now reach out and grab it.

References

- Aicher, T., & Newland, B. (2015). Consumer behavior. In T. Aicher, A. Paule-Koba, & B. Newland (Eds.) *Sport facility and event management* (pp. 159-178). Sudbury, MA: Jones & Bartlett Learning.
- American FootGolf League. (2015). *About FootGolf*. Retrieved from <http://www.afgl.us/thesport.html>
- Berg, B. K., Warner, S., & Das, B. M. (2014). What about sport? A public health perspective on leisure-time physical activity. *Sport Management Review, 18*, 20-31.
- Butler, B. N., & Aicher, T. J. (2015). Demonstrations and displacement: Social impact and the 2014 FIFA World Cup. *Journal of Policy Research in Tourism, Leisure and Events, 7*(3), 1-15.
- Cardenas, D., Henderson, K. A., & Wilson, B. E. (2009). Physical activity and senior games participation: Benefits, constraints, and behaviors. *Journal of Aging and Physical Activity, 17*, 135-153.
- Cerin, E., Leslie, E., Sugiyama, T., & Owen, N. (2010). Perceived barriers to leisure-time physical activity in adults: An ecological perspective. *Journal of Physical Activity and Health, 7*, 451-459.
- Coakley, J. (2011). Youth sports: What counts as positive development? *Journal of Sport and Social Issues, 35*, 306-324.
- Chalip, L. (2006). Towards social leverage of sport events. *Journal of Sport & Tourism, 11*, 109-127.
- Chase, C. (2014, April). Golf's experimental 15-inch hole is an unholy abomination (but the idea is right). *USA Today*. Retrieved from <http://ftw.usatoday.com/2014/goft-15-inch-holes>
- DCC. (2015). *About us*. Retrieved from <http://www.delawarecharitychallenge.org>
- Dionigi, R. (2006a). Competitive sport and aging: The need for qualitative sociological research. *Journal of Aging and Physical Activity, 14*, 365-379.
- Dionigi, R. (2006b). Competitive sport as leisure in later life: Negotiations, discourse, and aging. *Leisure Sciences, 28*, 181-196.
- Dionigi, R., & O Flynn, G. (2007). Performance discourses and old age: What does it mean to be an older athlete? *Sociology of Sport Journal, 24*, 359-377.
- Dixon, M. (2009). From their perspective: A qualitative examination of physical activity and sport programming for working mothers. *Sport Management Review, 12*, 34-48.
- Flying Pig Marathon. (2015). *FAQs*. Retrieved from <http://www.flyingmarathonpig.com>
- Haskell, W. L., Lee, I-M., Pate, R. R., Powell, K. E., Blair, S. N., Franklin, B. A., ... Bauman, A. (2007). Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Medicine & Science in Sports & Exercise, 39*, 1423-1434.
- Hritz, N., & Ross, C. (2010). The perceived impacts of sport tourism: An urban host community perspective. *Journal of Sport Management, 24*, 119-138.
- IOC. (2015). *Host city elections*. Retrieved from <http://www.olympic.org/host-city-elections/documents-reports-studies-publications>
- Ironman.com. (2015). *Races*. Retrieved from <http://www.ironman.com>
- Green, B. C., & Chalip, L. (1998). Sport tourism as a celebration of subculture. *Annals of Tourism Research, 25*, 275-291.
- Gibson, H. J., Attle, S., & Yiannakis, A. (1998). Segmenting the sport tourist market: A lifespan perspective. *Journal of Vacation Marketing, 4*, 52-64.
- Gibson, H. J. (2003). Sport tourism: An introduction to the special issue. *Journal of Sport Management, 17*, 205-213.
- Jacobs, B., Newland, B. L., & Green, B. C. (2012, May). *Exploring meaning and purpose in adult sport participation*. Presentation at the conference of the North American Society for Sport Management, Seattle, WA
- Lim, S. Y., Warner, S., Dixon, M., Berg, B., Kim, C., & Newhouse-Bailey, M. (2011). Sport participation across national contexts: A multilevel investigation of individual and systemic influences on adult sport participation. *European Sport Management Quarterly, 11*, 197-224.
- Memphis in May. (2015). *About Memphis in May*. Retrieved from <http://www.memphisinmay.org/memphis-in-may-info>
- Newland, B. L. (2015a). *Analysis of adult sport participation*. (Unpublished data). University of Delaware, Newark, DE.
- Newland, B. (2015b). Designing the event experience. In T. Aicher, A. Paule-Koba, & B. Newland (Eds.), *Sport facility and event management* (pp. 103-120). Sudbury, MA: Jones & Bartlett Learning.
- Newland, B. L., & Aicher, T. J. (2015a). *Analysis of adult active tourism*. (Unpublished data). University of Delaware, Newark, DE.
- Newland, B. L., & Aicher, T. J. (2015b, September). *Evolution of the adult sport participant: An exploration of sport induced outcomes*. Presentation at the European Sport Management Association (EASM) Conference, Dublin, Ireland.
- Newland, B. L., & Kellett, P. (2012). Exploring new models of elite sport delivery: The case of triathlon in the USA and Australia. *Managing Leisure, 17*, 170-181.
- Phillips, P., & Newland, B. L. (2014). Emergent models of sport development and delivery: The case of triathlon in Australia and the US. *Sport Management Review, 17*, 107-120.
- Rock 'n' Roll Marathon. (2015). *About us*. Retrieved from <http://www.run-rocknroll.com>
- Rundio, A., Heere, B., & Newland, B. (2014). Cause-related versus non-cause-related sport events: Differentiating endurance events through a comparison of athletes' motives. *Sport Marketing Quarterly, 23*, 17-26.
- Toughmudder.com. (2015). *Learn more*. Retrieved from <https://toughmudder.com/events/what-is-tough-mudder>
- Tri Habitat. (2015). *The facility*. Retrieved from <http://www.trihabitat.com>
- Wheaton, B. (2000). 'Just do it'? Consumption, commitment, and identity in the windsurfing subculture. *Sociology of Sport Journal, 17*, 254-274.
- Wolf, J., Berg, B., Newland, B. L., & Green, B. C. (in press). Managing the development of emergent sports: Lessons from mixed martial arts. *Journal of Sport Management*.
- Yang, L. & Colditz, G. A. (2015). Prevalence of overweight and obesity in the United States, 2007-2012. *JAMA Internal Medicine, 175*, 1412-1413.

The Business of Popular Music Publishing: An Interview with Troy Tomlinson, CEO of Sony/ATV Nashville

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Troy Tomlinson is the President and CEO of Sony/ATV Music Publishing in Nashville, a division of Sony/ATV. He has been in the music publishing industry for more than three decades, and has been with Sony/ATV since 2002. He was named to his current position in 2005 and has been guiding the company through the evolution of the music industry with the rise of digital music consumption and a dramatic drop in physical record sales. Being based in Nashville, Tennessee, Tomlinson oversees the operations of all country music for the world's largest music publisher. He has won numerous industry awards during his tenure at Sony/ATV, including being named the Broadcast Music, Inc. (BMI) Publisher of the Year as well as Billboard's Country Music Publisher of the Year—10 times in a row. He is also responsible for having signed acts such as Kenny Chesney, Taylor Swift, Blake Shelton, Miranda Lambert, Rascal Flatts, and others. At his role at the publishing giant, Tomlinson is also in charge of supervising and overseeing the catalogs and publishing rights of legends such as Willie Nelson, Hank Williams, and the Everly Brothers, plus millions of other works. I sat down with him in Nashville to ask him about his view on the changing industry of music publishing.

Sony/ATV is the largest music publisher in the world, co-owned by Sony Corporation and the Estate of Michael Jackson. The ATV in the name dates back to its original name when it was founded in Britain as Associated Television in 1955, with exclusive rights to broadcast weekend programming for the London region. ATV Music was the music publishing division of ATV, which, after going through numerous owners and mergers, was purchased by the late Michael Jackson, before being merged with a division of Sony in 1995. The music catalog of ATV Music, which included the publishing rights to most of the Beatles songs, was an important

financial asset of Michael Jackson and the merger allowed him, and now his children, to gain 50% ownership of Sony Music's publishing catalog as well. Music publishing companies such as Sony/ATV (Sony/ATV, Warner Music, and Universal Music are the three largest companies in this industry) are in charge of commercially exploiting the songs on behalf of their artists, assuring compensation when their works are used in ways ranging from commercials, downloads, and music streaming to TV and radio features. The artists—in this case composers and lyricists (songwriters)—sign a publishing agreement with their chosen publisher and share in the performance and licensing royalties gained from their works.

In a rapidly changing industry, where distribution of music is often exchanged virtually rather than through physical sales (i.e., records and CDs), the music publishing industry has had to keep up with the way music is being consumed. Gone are the days of Musicland, Virgin megastores, and thousands of local music retailers. Instead, the shift to instant digital delivery has forced the music publishing industry to change its focus into how its product is being consumed and to stay on the forefront of this still-evolving method of delivery. For example, whenever an Apple commercial features music by the rock group U2; the new James Bond soundtrack contains songs by Adele; or *Call of Duty*, the virtual reality game, includes music by DJ Skrillex the music publisher collects compensation for this usage that is then split among the persons responsible for creating the music. Sometimes it is a simple calculation, where the publisher receives 30% and the author 70%. However, in popular music, a song can include dozens of writers and composers, and each one can have their own percentage of ownership for the specific piece of music, making the royalty process rather complicated. In many cases, the performer is not even a recipient of these copyright royalties, because he or she does not write any of the music or lyrics, but merely performs them. This is more common in popular music with artists such as Britney Spears, who only has writing credits on a few of her big hits, but is less common with country music artists, such as Taylor Swift, who tend to write and compose a majority of their own material.

In the music industry, the music publishing area is the most convoluted and complicated division, bound by copyright laws and rates set by the federal government. Publishing is also the main source of income for the creator of the music. Gone are the days of records being the primary source of musical enjoyment, where the labels and publishers would be able to collect royalties simply based on the amount of physical albums produced and sold. As music streaming services have become the norm for music consumption, publishers have had to become increasingly aggressive in advocating for a fairer compensation for their artists and themselves. Federal law dictates the copyright rates and regulations for radio and TV, but it has not kept up with streaming services as efficiently as the music publishing companies have been advocating.

While instant music consumption is available more widely than ever, essentially turning every computer, tablet, and smartphone into a music player, many music creators are seeing their royalty incomes sharply diminishing. This has left a plethora of disagreements and lawsuits between publishers—who are seeing an unprecedented drop in royalties for their artists—and streaming services such as Spotify, Pandora, Apple Music, and even YouTube—who are enjoying valuations in the hundreds of millions of dollars because the majority of consumers today enjoy their music instantly through one of their services and they receive income ranging from paid subscriptions to advertisements.

In this interview, Tomlinson is asked about how he handles the transformations in his industry. He discusses among other things how being based in Nashville versus New York City or Los Angeles sets his work apart. He also addresses the Sony/ATV acquisition of EMI Publishing in 2012, which made it the largest music publisher in the world, the move to digital delivery of music diminishing the earnings for songwriters, and how Sony/ATV is specifically expanding its presence in the sport and entertainment marketplace, ranging from venues to the video gaming sphere.

Shaomian: What sets Nashville apart from New York City or Los Angeles when it comes to producing or introducing new artists? From Luke Bryan to Jason Aldean and Rascal Flatts—Nashville is really the home of “Americana” music.

Tomlinson: Look at all three primary music towns (Los Angeles, Nashville, New York)—Nashville has been a publisher and writer town since its inception. We focus on songs. It is THE publishing and songwriter town. That immediately starts at the grassroots of grassroots. There's no record without the song. There's also a cultural aspect that makes Nashville feel more organic, where music is primarily on the streets. We're a community within a community, which inherently promotes grassroots. As you consider meeting people in New York or LA, the chances are much smaller in comparison to this town. This is truly a tiny community. Therefore, we all know each other and hear of the same people floating around most of the time, and most folks wind up where they really ought to be.

Another difference is that in a lot of pop music, the publisher-writer relationship begins once there's a hit. There's heat on a song climbing the charts, and all the publishers then go after them to try to sign them. In country, we develop them from day one, and sometimes it takes several years to get them to the point of having their first single. None of these folks—Kenny Chesney, Eric Church, Miranda Lambert, and Blake Shelton—had record deals before they had publishing deals.

Shaomian: The artists you mentioned are big country music superstars, and they all write their own music and lyrics. Is this a phenomenon exclusive to country music artists?

Tomlinson: I can't say it's more than on the pop side, but in country, generally speaking, the artists are engaged in the

material they are going to sing. In the 1980s and '90s, that wasn't so true. Many songwriters who weren't artists were sought after because great artists knew they were great artists but needed well-crafted songs. Now more artists want to be a part of the process.

Shaomian: In 2012, Sony/ATV acquired EMI Music Publishing, the largest music publisher at the time, for around \$2.2 billion. The purchase and merger meant an additional catalog of more than 1.3 million songs, including the works of Beyoncé, Jay-Z, deadmau5, the Black Eyed Peas, and millions of others. The acquisition of the number one publisher put Sony/ATV at the top of the list in regards to the wealth and size of its music publishing catalog. Looking back on this acquisition, what were the challenges associated with integrating a catalog of that size and stature into your existing operations?

Tomlinson: It was the task of our worldwide administration, which is also based in Nashville with 170 employees, to migrate EMI's songs and data, including licenses from the past, royalty statements, etc., into Sony's system. This was the most arduous and time-intensive task on the administrative side. For the creative side, it was far easier. In Nashville, blending the two creative departments of EMI and Sony/ATV was simple. We were all friends because we had worked together prior to the acquisition. They were physically a block away and had a short move into our place. A lot of our writers wrote together, so adjustments were pretty easy. We also had several months leading up to it, so our planning began as if we were going to get them beforehand regarding personnel retention, caring for two rosters, and looking more at our competitors. We were No. 1 and they were No. 2. Sony/ATV Nashville was greater in country, but EMI was better worldwide.

Shaomian: Digital delivery has now been around about 12 years since the birth of iTunes, and even within that time period, downloads have moved to streaming with Spotify and Pandora in the last five years or so. Among other well-known artists, Taylor Swift decided to pull her music from the streaming services. What is your stance from a publisher's standpoint on streaming, and do you see any light at the end of the tunnel in regards to artists receiving a fair payout of royalties?

Tomlinson: I have to remain optimistic that ultimately, if consumers can get any music they desire instantaneously, at a price point that's more affordable than it's ever been, we've got to find something that works for all the parties involved, including the service, record label, etc. The public isn't unhappy about delivery; the problem is the unequal distribution of revenues generated. Seventy-five percent of all revenue generated from songs (that comes into the publisher) is regulated in one form or another by federal law via rate court or consent decree. Forces outside of the free market dictate what the writer and publisher are paid. Only 25% of revenue brought in is negotiated at a fair market value, which is primarily sync (a synchronization license, which refers to songs being used with a visual output such as film, TV, com-

mercials, computer games, etc.). Because of these consent decrees in particular, we're handcuffed and can't negotiate with a digital service provider for a fair and equitable rate. The United States Department of Justice is looking at the consent decrees to see if they're now hurting an entity. It's so one-sided for the songwriter and publisher. A congressional judge in the 6th panel said to a songwriter that as long as [the government] can keep your rate down, more digital companies can open and prosper. The songwriter replied that this would be like saying to the farmers, "If you take less for your vegetables, more restaurants could open!"

Shaomian: How do we make the point that digital service cost wouldn't rise?

Tomlinson: The streaming service doesn't create a product. They are the conduits to the consumer. That's capitalism at its best. They're a delivery system. When you look at the amount of service dollars to that delivery vs. the artist, it's disproportionate. They're looking at using decrees to keep the amount paid to songwriters as low as possible. We are not saying they're doing something illegal; we're asking for fairness. They say, "We are a music partner; we put music first." But the next day they litigate to push the rates down further. Admit you are aiming for profit first and will use every method to pay out as little as possible to the creators.

In the 1940s, the Department of Justice sued the American Society of Composers, Authors and Publishers and Broadcast Music, Inc. (BMI), both prominent performing rights organizations, for driving up the cost of music licensing due to their enormous market power. Several legal settlements—consent decrees—followed, but those decrees have shaped the music publishers' rights and limited their negotiation powers for decades and the industry has been arguing that it is time to allow them to negotiate directly with the digital music streaming services instead of being bound by rates set by a special rate court. The streaming services have been pushing back, because they are concerned that their rates would rise if the publishers could set them on their own.

With the rise of a new generation of superstars in this digital era, such as Taylor Swift and Adele, they have been able to negotiate complete ownership over their music when it relates to the master recordings (the actual original recording of a song that all other recordings are made from), or masters, which is a required item for the streaming services to be able to stream the music. This explains part of the reason why those artists have been able to keep Spotify or Apple Music from streaming their albums to free user accounts, because those streams pay very little in royalties as opposed to purchased downloads from iTunes or Amazon's Digital Music Store.

Shaomian: In comparing music aggregators to travel agents, would publishers be able to come up with something similar?

Tomlinson: My guess is that the consent decrees in place would prohibit us from doing that because some of the digital streaming services may have record labels with a stake in

the company. As for artists such as Taylor (Swift), the reason she was able to pull her music off is because she owns the rights to her own master recordings, which is something the streaming services need in order to stream. If it were a record company or publishing company owning those rights, it would not have been taken off the streaming services. They didn't put those up there, and the consent decrees force us to say yes and talk about pricing later, which goes to a rate court and ultimately a depressed price. Artists/labels can say no to every master recording, but streaming services can use their recordings. As a writer/publisher, they can't decide because of the consent decrees.

Shaomian: Although country music audiences still have a strong relationship to radio, with the growth of streaming services, the bottom line had to have been affected. Tell me about mechanical royalties (which refers to the per-unit payments made to the music publisher for each song or album sold).

Tomlinson: True album sales have been affected by the major big box retailers, because they measured performance in dollars they earn per square foot of their stores. So, if they can increase margins on that dollar per square foot, they'll take that step, replacing music products with non-music merchandise. Thus, first we watched the diminishment of the square footage where we sold a large part of our product, so that was our big hit in mechanical royalties. Then people's desire to get it quicker, easier, and cheaper (e.g., one song vs. an album) took us down. Now streaming has cut the legs out from under us further because of the displacement of revenue to the stream, which is nearly \$0.00, versus the \$0.99 for a single download and a \$12 album. This displacement shows that we can't stream enough to make up for an actual (mechanical) sale. So now, performances have become a strong means for creating revenue for artists/publishers. Radio is still fairly popular, and it continues to be a primary means for letting the fans find out about new artists, particularly country artists, because people are devoted to their DJ or radio format. Some radio stations with centralized programming have less loyalty, but there's still a loyalty to that voice that they're hearing. Country music fans are devoted. Kelsea Ballerini, a singer-songwriter, had a No. 1 hit out of the box. Her radio and promotion team laid the groundwork for her to go into country radio, and it paid off. She's still got to do shows and meet-and-greets, but she now has an amazing opportunity to take off. In the visual negotiations (e.g., YouTube, video games, television commercials, etc.) we can focus on sync licenses and growth there, because with sync licensing, we can set our own pricing depending on the song and artist that the client wants to use for their film, commercial, or video game.

Shaomian: Can you discuss your company's efforts to exploit your sizeable music catalog in the sport and entertainment marketplace? There is a considerable merging of music and sports in the entertainment arena.

Tomlinson: All under the header of entertainment is where it's blended. We have multiple departments in differ-

ent cities: film and TV, gaming, commercials. Our headquarters is in New York, but in our Nashville office we have our own film/TV person. We continually refine using technology and the breadth of our catalog with keywords/phrases/tempos and subgenre sounds (e.g., rock-country song vs. traditional country song). Metadata helps us sort the millions of songs we have, and as partnership opportunities arise (they come to our licensing department: description of project, what they think works generally, etc. after seeing visuals, and what music will support these), we use the sorting and make pitches of various songs that fit what they described. If we're lucky, we get in, and sometimes our competitors get in as well. It all works in the context of the game, though. Sometimes they'll give us 1-2 sentences to our New York or LA office, who then forward it to us, and in those cases the music begins to be an earlier part of the creative process. Normally they'll have the visuals before. For example, (video game) Grand Theft Auto was extremely specific. Driver steals car, goes from interstate to country road, feels relaxed, and turns on the radio. What comes on? We then decide the right song for that moment, and that's really fun. When you find the one they love and license it, it's pretty cool to be a part of that finished product.

Shaomian: With an increasing call for more transparency in music licensing, what is Sony/ATV doing to make its copyright licensing and administration as user friendly as possible?

Tomlinson: There is continual talk about centralized/user-friendly licensing, and we pride ourselves on being conscientious to the needs of people who desire to properly license our music. We have large enough staffs with a public front where businesses know how to get in touch with us. We provide enough people to meet their needs. It's difficult for people who want to do the right thing and license for, say, 500 copies of a wedding DVD (in order to pay the royalties for the music featured on the DVD). I ultimately think there will soon be a better way because of where technology is headed. We are currently engaged in a desperate battle for the future of songwriters and their publishers. Not to be overstated for drama, but it doesn't take much if you believe in streaming as the future. We won't even be using the term "mechanical" regarding royalties in the future; you don't have to think very far to see that the current distribution of royalties will negatively impact the creation of great music in America in the future. People need to be able to make a living while they're practicing and providing art so they can take care of their families. Sony is optimistic and supports development of new talent (everything on red or black and spending the money), but we can't expect everyone involved in the creation of music to invest the way we have if the return at the end of the day doesn't improve. From where I sit, that's something I wake up with every day and go to bed with every night.

SUBMISSION GUIDELINES

The mission of *Sport & Entertainment Review (SER)* is to become the outlet for the best new ideas for people creating, leading, and transforming sport and entertainment organizations and businesses. *SER* seeks to be one of the world's leading journals on publishing cutting-edge, authoritative thinking on the key issues facing executives in the world of sport and entertainment.

Articles published in *SER* cover a wide range of topics that are relevant to the different industries in sport and entertainment (such as professional sport, live performances, music, theater, dance and art, etc.) around the world. To further enhance these industries, authors are invited to write about theoretical concepts in leadership, organizational change, negotiation, strategy, operations, marketing, finance, sales, human resource, and event and project management. Preference will be given to authors able to draw upon previous research they conducted in a particular area and are able to show how their previous studies furthered the understanding of this particular area.

While we encourage diversity in all subjects, all *SER* articles will have certain elements in common: (1) they are written for senior managers who benefit by the content and the article clearly articulates how the knowledge can be applied to the workplace; (2) the ideas presented in the articles can be translated into action and have been tested in a sport and entertainment industry context. Proposals that demonstrate fresh thinking that advances previous knowledge whose practical application has been thought through in clear, jargon-free language are those most likely to meet the readers' needs.

Proposals should answer the following questions:

1. What is the central message of the article you propose to write? What is important, useful, new, or counterintuitive about your idea? Why do managers need to know about your idea?
2. How can your idea be applied in business today?
3. For which kinds of companies would your idea work especially well? For which kinds of companies would the idea NOT work well? Why?
4. What research have you conducted to support the argument in your article?
5. Upon what previous work (either of your own or that of others) does this idea build?
6. What is the source of your authority? What academic, professional, or personal experience will you draw on?
7. What is the applicability of your idea beyond your own discipline of sport or entertainment, and how can it benefit the other fields in sport and entertainment? (e.g., if your study originates in sport, how can it benefit managers working in music, theater, arts, or live performance, and vice versa.)

The proposal should address the questions above (it does not need to be written in question-and-answer format) in a narrative outline (500-750 words). The outline should describe the structure of the article and detail each important point in a separate paragraph (excluding reference list).

Provide not just a sense of your primary ideas, but of how the logic of the ideas will flow. Points should be illustrated with real-world examples or one extended, detailed example.

Proposals will undergo blind peer-review to assess to what extent the proposal fits the submission guidelines of *SER*. This review process will take up to four weeks and could lead to three different decisions:

1. The proposal is accepted and the author(s) will be invited to submit a full article manuscript (3,000-5,000 words).
2. The reviewers provide positive feedback about the proposal, but invite the author(s) to revise the focus of the article and resubmit the proposal before moving on to a full review.
3. The reviewers decline the proposal.

The proposal must include the following elements in the order listed:

1. Title of proposed article.
2. Author's name, institution, contact information.
3. Narrative (500-750 words). Narratives should be submitted in 12-point Times New Roman font, using American Psychological Association (APA) Guidelines.
4. Reference list.

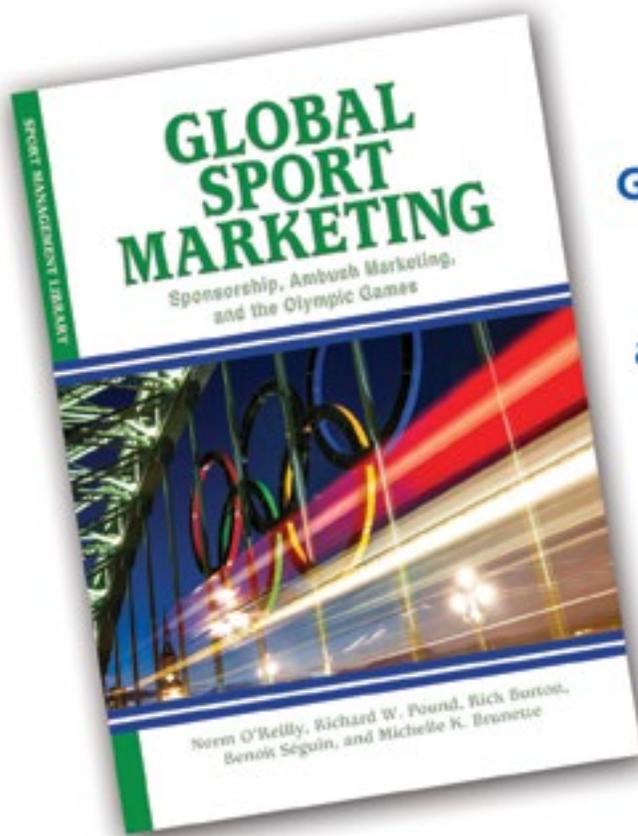
If a proposal is accepted, authors will submit a full-length article (3,000-5,000) for the review process, using the APA guidelines. While it is the intention of the editorial board to accept each article at this point of the review process, acceptance is not guaranteed. Reviewers retain the right to reject the manuscript, particularly if the authors are unwilling or unable to incorporate reviewers' suggestions for revisions.

Proposals should be submitted to SER editor Bob Heere at bheere@hrsmsc.edu, or assistant editor Chad Seifried at cseifried@lsu.edu

All inquiries about the submission and review process should be directed to Bob Heere via email at bheere@hrsmsc.edu

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Global Sport Marketing: Sponsorship, Ambush Marketing, and the Olympic Games

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As sport marketing matures, as social technologies advance, and as the Olympic Games cement their position as the largest and most important mega-event in the world, marketers everywhere are increasing their sophistication in using the Olympic platform to achieve their objectives. Indeed, whether official sponsor or ambusher, marketers everywhere are expanding their interest in those few special platforms—like the Olympic Games—that enable them to reach the masses in very customized ways. Whether you are a student of marketing or a practitioner in the field, this book provides the intricate knowledge of sponsorship and ambush marketing needed to navigate the globalized sport marketing industry.



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