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A Forecast for the Mainstreaming of Environmental Sustainability

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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

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& 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 conscientiousness 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 360º 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 components 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.

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