

## **Benchmarking in event management – a sustainability approach**

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### **Abstract**

Identifying best-practice, sustainability-driven examples in event management will enable event managers to set baseline criteria aimed at delivering more sustainable events. A methodological framework for this subject has so far not been developed and is expected to differ from conventional benchmarking. This paper presents a novel, yet generally applicable, framework of sustainability benchmarking for events based on an initial benchmarking cycle implemented over four events and on a literature review. The presented framework comprises four phases and eleven steps and draws general conclusions on sustainability benchmarking for events.

**Keywords:** benchmarking, sustainability, benchmarking process, sustainability benchmarking method, event, festival

### **Introduction**

Sustainability is becoming an increasingly important theme in both practical event management (e.g. the ambitious aim to organize sustainable Olympic Games in London 2012 or the development of a Standard for Sustainable Event Management (BSI 8901:2007)), and in scientific discussion (e.g. Musgrave and Raj 2009). Furthermore, as the paradigm of sustainable development becomes more widespread among the general public, event managers are increasingly having to respond to public scrutiny over the sustainability performance of their events.

As sustainability measures are relatively new to many event managers, they may struggle to effectively integrate them into their management approach. Getz (1998) discussed options and possibilities for a learning process within event management. He conducted a survey analyzing the “Information Sharing Among Festival Managers” in two Canadian districts and focused on the information sources of event managers and active information exchange. The results indicate that event managers share information “but the nature of sharing appears to be largely informal and unsophisticated, as well as somewhat constrained by a desire to guard sources of funds and sponsorship” (Getz 1998, 47). He concluded that it is essential for learning organizations to gain input from outside sources and recommends the use of formal methods such as benchmarking (Getz 1998).

Benchmarking is widely used by different business branches to improve their economic performance. The concept is based on the idea of reaching a better market position than a direct competitor by identifying and adapting best-practice examples (Camp 1989). Various benchmarking approaches have already considered environmental issues and, more recently, have begun to discuss the integration of sustainability issues (e.g. Clausen 1998, Rauberger 1998, Kaldschmidt 2009).

However, event managers have rarely employed such tools, perhaps due to the nature of the organizational structure of events and the long-established frameworks employed for benchmarking processes: Unlike ongoing commercial businesses, events are temporally limited and often only recur once a year, causing different organizational structures and limited time resources for data collection and implementation of best-practice examples. Furthermore, due to the diversity of events, developing sustainability performance indicators and implementable measures requires a specific approach in order to be comparable within a benchmarking project. Moreover, the specific needs of events within a benchmarking process may differ, such as time availability, vested interests and a willingness to share sensitive information.

Therefore, this paper focuses on sustainability benchmarking and on how it can improve the implementation of sustainability within event management by identifying best-practice examples and learning from other events. To identify general criteria relevant for the sustainability benchmarking for events, we carried out a literature review. The findings of this review informed an initial benchmarking cycle, which comprised four events (two street parades and two music festivals) with more than 50,000 visitors. Based on these approaches, we developed a benchmarking framework that can broadly be applied to event management and which also incorporates sustainability issues.

### **Literature review: Benchmarking as an instrument for ongoing improvement of sustainability performance in event management**

Benchmarking aims to identify best-practice examples that the benchmarking partner can implement within their own business. Camp (1989) mentioned four types of benchmarking that can be applied depending on the benchmarking partner and the function of the benchmarking approach: *Internal benchmarking* concentrates on good practice within the own business and uses the experience to increase the performance of other departments within the organization. External benchmarking can be organized as a *competitive benchmarking*. This involves information on competitors in the same branch or field, however, quite often the direct competitor is not willing to share information and the interested party can only refer to published business reports. *Functional benchmarking* concentrates on good performance relating to a specific activity or concepts performed by an organization while *generic benchmarking* focuses on individual processes and methods. Businesses normally practice functional and generic benchmarking with benchmarking partner of other branches in order to identify new activities or processes to gain a competitive advantage in the own branch (Camp 1989).

Benchmarking in event management, and particularly sustainability benchmarking, is rarely carried out. Existing approaches, e.g. from manufacturing processes, are hardly applicable to event management as the processes are different. In contrast to most manufacturing processes or services, events usually represent one-off or once a year occasions that require long preparation and post-processing periods.

Taking these event specific aspects as well as the relevant issues pertaining to sustainability benchmarking into account, we reviewed available literature on benchmarking and events focusing on five issues: (1) the benchmarking process, (2) the benchmarking issue or object, (3) benchmarking partners, (4) indicators and (5) internal acceptance.

### *The benchmarking process*

Possible benchmarking processes have frequently been described in detail. Deros et al. (2006) analyzed several frameworks for benchmarking especially for producing small to medium-sized enterprises (SME's). Most frameworks follow the plan-do-check-act circle of Deming (1986), which was introduced as a step-by-step approach supporting transformation in businesses and enabling ongoing improvement. Therefore, the frameworks often establish four benchmarking phases with further detailed steps (Deros et al. 2006). Camp (1989) introduced the first benchmarking process, which was implemented by Xerox to regain market leadership. He also used four phases but with different terms (planning-analysis-integration-action) and established 10 steps. Within the planning phase, it is important to (1) denominate and identify the benchmarking issue, (2) identify possible partners, and (3) agree on relevant data and a common method for data collection. The analysis phase starts with (4) the identification of performance gaps, followed by (5) appointing the intended performance level. The integration phase concentrates on (6) the communication of the results and search for support, and (7) the setting of goals that are functional. Within the action phase, concrete measures should be (8) planned, and (9) implemented and the performance controlled. Finally, benchmarks might change (10). The benchmarking process aims at developing an improved market by adopting the identified best practice (Camp 1989).

Other approaches concentrate on more specialized benchmarking processes that seek to increase the understanding of SME-specific applications (e.g. Deros et al. 2006). This specification is caused by limited resources in SME's. Most SME's do not have enough resources to fulfill the requirements of the existing framework or the complicated structure of the proposed frameworks. Large international companies have different possibilities of implementing a benchmarking project based on complex frameworks. Deros et al. (2006) state that there was formerly no specific framework that met the specific criteria for SME's, so they developed a benchmarking framework which follows the plan-analyze-integrate-action circle of Camp (1989) and identifies similar steps. They emphasized the relevance of self-assessment and internal benchmarking before starting an external, or best-practice, orientated benchmarking approach and they described a step-by-step framework that can be closely followed by SME's.

Ecological benchmarking studies (Clausen 1998, Rauberger 1998) planned and conducted between scientists and commercial organizations proved the need for a benchmarking meeting. The direct exchange about data, data quality and data collection difficulties during a

benchmarking meeting of all actors participating in the benchmarking process reduces the risk of drawing erroneous conclusions (Clausen 1998, Rauberger 1998).

Projects dealing with sustainability benchmarking are rare. One analysis concentrates on sustainability reporting and its relation to benchmarking. The Institute for Future studies and Technology Assessment (Institute for Future studies and Technology Assessment [IZT] 2006) recommends using the reporting process as a benchmarking process for internal use. The comparison with other reports enables the firms to analyze their own position in comparisons to other firms. Comparable reports including all three dimensions of sustainability (economic, social and environmental) are hardly available - particularly because no framework for such reporting exists and the data collection processes are not transparent.

For events, a concrete implementation example is introduced by Stettler et al. (2005) and Rütter et al. (2002), who developed a Sports Event Scorecard following the concept of the Balanced Scorecard of Kaplan and Norton (1992) as a management tool for events. The event scorecard is a tool used to analyze the socioeconomic impacts of events on a region (Rütter et al. 2002). Along with a common economic scorecard, they introduced an environmental, a social and a coefficient scorecard. In a second project phase, the scorecards were further developed and used for benchmarking. Due to the heterogeneity of sports events, the benchmarking should be flexible and adaptable to the various event types (Stettler et al. 2005). The study describes two types of benchmarking: (1) Benchmarking initiated by an organization to improve its own performance, and (2) benchmarking from external actors to compare performance and to assess the quality of the event (Stettler et al. 2005).

Benchmarking from external actors is not perceived as real benchmarking because it does not aim at improvement, but on performance assessment for judgment (Stettler et al. 2005). Self initiated benchmarking follows closely the process introduced by Camp (1989) and is outlined as follows: (1) Identify the aim and object of benchmarking; (2) describe the internal processes relating to the benchmarking object; (3) if possible, conduct an internal comparison and/or find external benchmarking partners to cooperate with; (4) compare the processes and interpret the results; and finally (5) identify measures and evaluate their implementation and efficiency (Stettler et al. 2005).

The literature shows that especially the size and management structure of an organization can determine the aptitude and approach toward implementing a benchmarking approach (Deros et al. 2006). In general, events have different structures than international companies, which require adaptations of classical benchmarking processes. Therefore, there is a need for a particular benchmarking framework considering event specific and sustainability criteria. This should include a benchmarking meeting to guarantee exchange on data, data quality and boundaries as well as best-practice examples and knowledge on structures, strengths and weaknesses of the benchmarking object (Clausen 1998, Rauberger 1998; Deros et al. 2006).

#### *Benchmarking issue or object*

A common benchmarking theme is economic performance and its improvement (Camp 1989). However, sustainability benchmarking approach requires the inclusion of economic, environmental and social issues and their integration (Kaldschmidt 2009). The benchmarking issue in detail depends on the benchmarking partners, who may have different goals or vested

interests they hope to realize in the process (Deros et al. 2006). Therefore, the issue of the benchmarking depends on relevant aspects for the event managers and sector-specific topics, on which the benchmarking partner have to agree on.

### *Benchmarking partners*

The selection of benchmarking partners is a further important aspect within any benchmarking process. First, it is important that all benchmarking partners share mutual trust, because they often deal with confidential information such as indicators and management processes (Camp 1989). Julie's Bicycle (2009), a British nongovernmental organization for the music industry that is "taking the heat out of music", developed a confidential gateway to facilitate benchmarks and developed a benchmarking concept aimed at reducing CO<sub>2</sub> emissions associated with music events and providing guidance to event organizers. Julie's Bicycle calculates CO<sub>2</sub> emissions by provided data on traffic and energy consumption, waste and sewage, but they only publish the benchmark (Julie's Bicycle 2009). As the event organizers do not have to publicly reveal their own performance, the method makes it difficult to explain differences reasoned by calculation or data collection.

A second criterion for the selection of benchmarking partners concentrates on the reputation of an event. Success concerning the benchmarking object is as important as the overall excellence achieved, as stated by Getz (1998). For events, it is important to stand-out in terms of artistic and programmatic quality to be able to develop best-practice examples (Getz 1998). Sustainability benchmarking for events requires, artistic and programmatic excellence, as well as experience with sustainability measures.

Thirdly, the events should be comparable and similar in size, issues recognized, location and several other characteristics (Stettler et al. 2005). Julie's Bicycle will establish benchmarks for *different* types of music events (Julie's Bicycle 2009). For businesses, Rauberger (1998) asserts that benchmarking and its results profit by comparing similarly structured firms. Stettler et al. (2005) drew the same conclusion for sports events and emphasized that the comparison of results should indicate differences. Therefore, the benchmarking process needs to consider the heterogeneity of the event industry.

### *Indicators*

Indicators are essential for benchmarking projects. While financial indicators are commonly used and the data collection process is mostly identical, common standards for environmental and social indicators are, as yet, not available.

For ecological benchmarking, data sources differ from economic benchmarking. Most commonly, published environmental figures vastly depend on the method of data collection employed, and the data exhibits a lower comparability than that of economic data (Clausen 1998). Therefore, a similar data collection methodology is crucial for the comparison of any performance indicators, and it is necessary to agree on a coherent data collection and calculation method and reference figures (Rauberger 1998, Clausen 1998).

To display sustainability performance, IZT (2006) suggests using the Sustainable Value approach. This approach factors-in costs for environmental and social resources and expresses

the sustainability value as one monetary figure. The concept of IZT (2006) does not explicitly consider best-practice comparisons, but it concentrates on internal structures for reporting and benchmarking. It shows the necessity for continuous structures to establish sustainability within firms. Furthermore, by introducing the Sustainable Value approach, the concept deals with the difficulties of presenting sustainable performance indicators.

Kaldschmidt (2009), on the other hand, suggested several indicators based on the Sustainable Excellence approach of the European Foundation for Quality Management. The indicators refer explicitly to effectiveness and efficiency. Furthermore, Kaldschmidt (2009) introduced *innovative indicators* and included established indicators in the selection. The selection is presented within a concept for sustainability benchmarking and combines all three dimensions of sustainability (Kaldschmidt 2009). The implementation of sustainability benchmarking enables businesses to monitor their market position, continuously learn and improve their sustainability performance (Kaldschmidt 2009). Still, the concept focuses on producing businesses with the already mentioned limitations and it does not specify the benchmarking process itself.

The concept of Julie's Bicycle (2009) includes indicators on traffic, energy consumption, waste and sewage, which are used for CO<sub>2</sub> calculation and are summarized as a benchmark for different event types. The method has two weaknesses however: firstly, there is no standard method for data collection described, and the calculation itself is not traceable because Julie's Bicycle publishes only the benchmark for confidentiality reasons. Second, differences reasoned by calculation or data collection remain hard to explain. Nonetheless, the approach provides a general impression of the level of CO<sub>2</sub> emissions associated with various types of music event as one aspect of sustainability performance.

Stettler et al. (2005) used a selection of indicators embedded in the Sports Event Scorecard for comparison. Here, the main emphasis is on the economic impacts on the region and the event organization, while only a few environmental indicators such as traffic, energy consumption and emissions are suggested. They describe the reason for choosing the indicators and provide information on the indicators themselves, but there is no information about any coherent data collection process, which Clausen (1998) named as essential for comparing indicators – particularly when dealing with environmental indicators.

In general, it might be helpful to combine the use of tangible and intangible indicators, which supports the understanding of processes (Deros et al. 2006).

Summarizing the literature, for a benchmarking process it is very important to consider the informative value of an indicator. Particularly for sustainability issues, it is important to combine all three dimensions of sustainable development and use the synergies, which develop as a result (Kaldschmidt 2009; IZT 2006). IZT (2006) suggested a single indicator to display the Sustainable Value of an enterprise. Kaldschmidt (2009), on the other hand, denominates several indicators, which additionally cover relations between the three sustainability dimensions. The IZT (2006) approach of introducing a Sustainable Value single indicator does not necessarily meet the requirements of a benchmarking process. Detailed indicators, on the other hand, may result in a huge workload and a confusing interpretation

situation. Therefore, the careful selection of suitable indicators is a crucial step for any benchmarking project.

Even less discussed are sustainability performance indicators for events, which so far do not cover the range of all three dimensions for benchmarking. Therefore, further research and testing is needed to develop applicable indicators of sustainability performance.

#### *Internal acceptance*

Internal acceptance and support for the benchmarking process (Deros et al. 2006) and the willingness to adopt new measures by the employees and crew (Deros et al. 2006; Getz 1998; Stettler et al. 2005) is important to guarantee the success of any benchmarking project. Camp (1989) mentioned the approval and support of benchmarking by the management to ensure success of the process as well as to gain acceptance for necessary changes revealed by benchmarking. Furthermore, participating employees need to know about their role and work for the objective of the benchmarking project and be able to describe it. They should be open to new ideas to learn and apply best-practice examples (Camp 1989). In this sense, Camp (1989) emphasized the relevance of the integration and action phase within his framework. In the case of events it might be difficult, especially if subcontractors are involved or the crew changes regularly. However, Stettler et al. (2005) cite the willingness of the employees to learn and of the organization to profit from the results of the benchmarking as mandatory requirements for events, too.

### **First insights from a sustainability benchmarking project for events**

Since 2009, we have conducted an external benchmarking project working with four urban events covering two street parades and two music festivals in Germany and Norway. The pre-test, which was implemented in 2009/2010 included six steps:

*Choose benchmarking partners:* We contacted the event organizers of various street parades and music festivals and provided further information on sustainability benchmarking and a preliminary timetable for the interested event organizers. In total, four urban events decided to take part in the benchmarking: two street parades and two music festivals with fenced event sites. The event managers received confirmation that we will not publish their data unless they agree beforehand.

*Identify benchmarking object:* We interviewed the event organizers about their internal structures and relevant aspects for benchmarking. This was necessary to adjust the timetable and identify necessary indicators. Some events implemented neither environmental or social measures nor sustainability performance measurement. However, they implemented measures to counteract a possible negative sustainability impact without explicitly identifying it as a sustainability measure. During the interviews, we suggested relevant areas and data collection processes. The event organizers commented on it and added some extra aspects.

*Data collection frame:* This step was followed by a comparison of the different focuses of the event organizers and possible data collection methodologies. Both the focal aspects and the data collection process are combined in the data collection frame, which includes the indicators and a common data collection procedure. All event organizers checked the data

collection frame in respect of applicability to their events and, where necessary, suggested adjustments. In total, 77 issues were included in the list, covering general information about the event as well as ecological and social issues (see Table 1 for examples).

Table 1 Examples of indicators

Object	Indicator	Data collection from	Boundaries
General Information	Number of visitors	Counting, estimation, ticket sales	Visitors attending the event in total (sum of visitors each day)
Energy	Energy used during event	Bills	Total energy consumption on event site during event (all consumers)
	Energy used by stages	Electric meter or bill	Used energy at a single stage
	Cost or savings for energy saving lighting	Bills	All cost savings achieved from using energy saving lighting over conventional lightning
Land use	Costs for land restoration	Bills	Cost for restoring areas used by event
Health	Working hours of paramedic staff during events	Interview	Working hours of all paramedic staff during events
	Number of visitors per paramedic	Calculation	Ratio of visitor number against number of working hours of paramedic staff for duration of event

*Data collection:* The event management used the data collection frame to compile the necessary information and data on their own. They also described the quality of data and time of collection. In addition, event managers were asked to explain measures relevant to the issue and costs related to the measures. This happened after event staging in summer.

*Indicator calculation:* We received the data and calculated the indicators including reference figures such as attendance, size of the event site and/or duration of the event. The event managers did not provide information on all issues; in particular, measures taken and related costs were rather poorly documented. Every event received its own indicators openly as well as the indicators of the other events anonymously for reviewing.

*Benchmarking meeting:* The indicators themselves did not display all details about the recorded measures and circumstances, therefore, a benchmarking meeting was held in January 2010 to discuss the results. Three of the four events participated. This was the first occasion the benchmarking partners got in contact with each other and all were willing to discuss the indicators openly. The proposed indicators were used for explanation or differentiation, but in the discussion, the benchmarking partners showed varying levels of knowledge in respect of sustainability measures for events. This caused difficulties for the analysis of the sustainability performance indicators. Although all the event managers implemented measures related to sustainability, some treated them not explicitly as sustainability measures. The benchmarking meeting ended with the correction and addition of indicators for the following benchmarking round.

Initial findings from the pre-test and comments from the benchmarking partners concentrated on the process itself and the selection of indicators. In general, the event managers agreed on the benchmarking process and the selection of indicators. The event managers did not

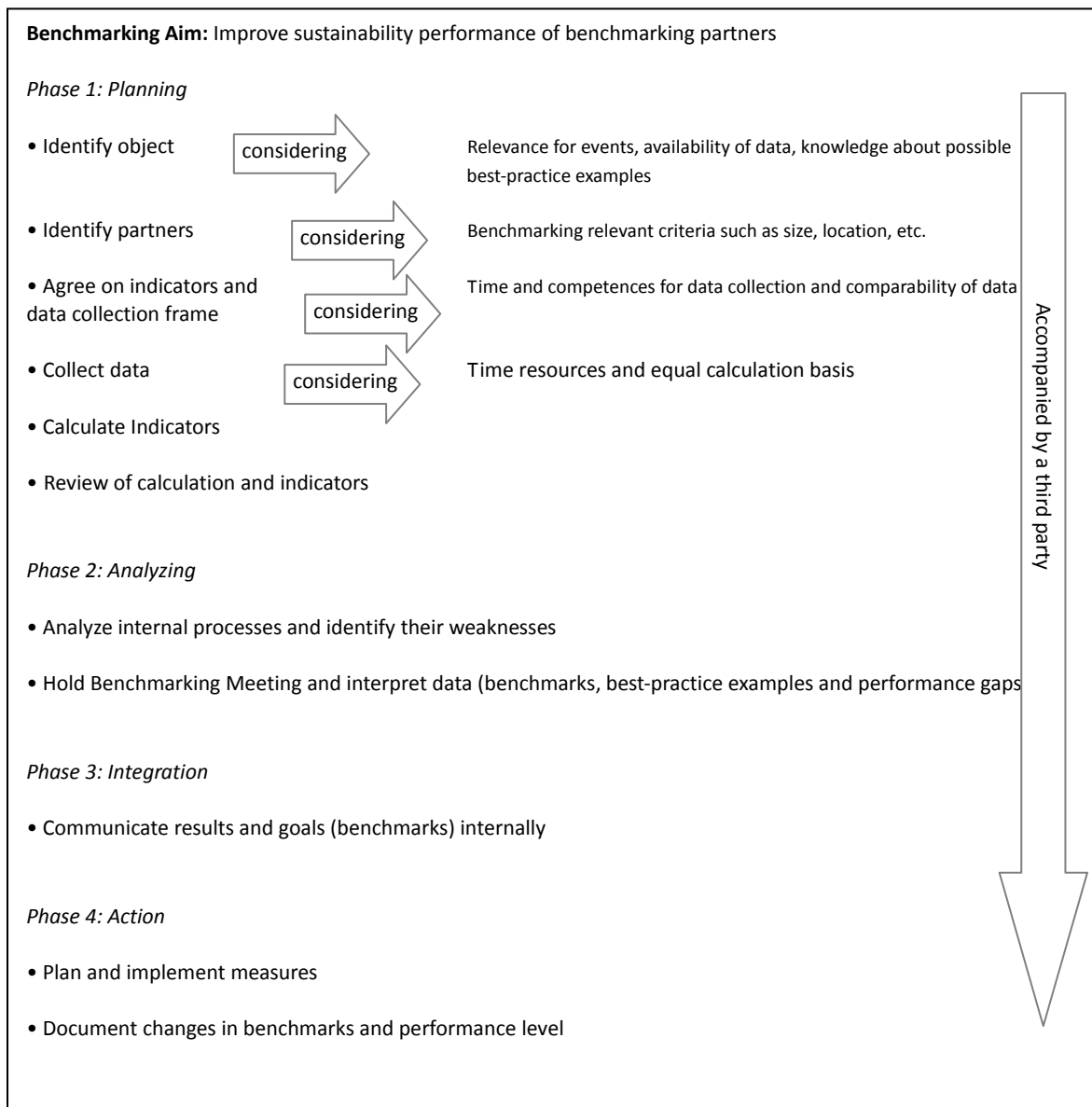
mention any problems concerning the time used for data collection or the complexity of the methods applied. One benchmarking partner emphasized that it is important to arrange deadlines and meetings early to avoid peak times and to give the chance to cope with the additional workload. Particularly the events that had not previously implemented many sustainability measures or measured performance benefitted very much from the meeting. Other benchmarking partners perceived it as beneficial to provide personal experiences to support other events in improving their sustainability performance, but were also interested in the comparison and their own performance.

The pre-test results support the observation of Getz (1998) that (sustainability) benchmarking is a useful tool for information exchange and learning. Furthermore, some benchmarking process specifics were revealed. This includes the timeframe and detailed exchange between an external actor who arranges the benchmarking and the benchmarking partner, as well as between the benchmarking partners themselves.

### **A process for sustainability benchmarking for events**

Considering the findings of the pre-test and the tried and tested benchmarking frameworks from the literature (Camp 1989, Deros et al. 2008, Stettler et al. 2006), the following general framework is suggested for the sustainability benchmarking for events (figure 1). This general framework emphasizes crucial steps for the benchmarking process and considers the applicability to most events.

Figure 1 Sustainability benchmarking process for events



The proposed framework displays external benchmarking projects within the event sector. It is not necessarily a competitive benchmarking, even if only events participate; because events often address different visitor groups and take place in different places or at different times. Depending on the benchmarking objects, it may be considered an external (within the event management branch), partly competitive, functional or generic benchmarking process.

The third and the fourth phases of the suggested framework for benchmarking do not differ from the framework as it is described by Camp (1989) and Deros et al. (2006). Here, the event managers themselves need to put effort into progress of benchmarking and its results. The first two phases deviate from common frameworks. The changes made reflect conditions for sustainability benchmarking and event specific aspects. Especially the precise examination of indicators and the collection and calculation processes display the complexity of adopting sustainability as a benchmarking issue - which is constrained by the limited time resources of

events. A clear aim, objective and indicator selection guarantees a focused analyzing process. On the other hand, it is also important to maintain a broad range of issues to identify strengths and weaknesses of events concerning sustainability performance.

The second phase starts with the reflection of the event's own processes and its weaknesses. Indicators might ensure a more detailed analysis as this enables the event managers to provide specific information on specific processes and measures during the benchmarking meeting, which follows this step. The benchmarking meeting includes the same steps as Camp (1989) suggests in his framework: During the meeting, benchmarks, best-practice examples and performance levels of each event are discussed and the underlying processes are analyzed for transferability to other events. The open discussion about processes and measures enables the event managers to consider the heterogeneity of events.

Furthermore, the benchmarking process was improved by the inclusion of an external actor, such as an association, scientist or consultant. It proved to be useful to the successful implementation of a benchmarking project, considering the limited time resources and experiences of most event managers in sustainability aspects. This approach probably guarantees the quality of both the benchmarking process and the exchanged sustainability indicators. Furthermore, it might guarantee the confidentiality of the provided data between the events, as Julie's Bicycle (2009) pointed out. Therefore, the close connection between the external actor and the benchmarking partner is important.

The objective and selection of indicators should follow the idea of sustainability and combine at least two of the three dimensions of sustainability. This implies the use of economic, social and ecological indicators as well as their combination and might induce eco- or socio-efficiency indicators as suggested by Kaldschmidt (2009). Apart from the comparison of differences displayed by indicators, discussion of qualitative aspects, such as implementation measures and management structures, proved to be relevant during a benchmarking meeting.

However, our approach again showed the importance of documenting a detailed data collection frame to make it easier for event managers to participate and to enable a common data collection procedure securing comparable indicators.

Planning benchmarking well in advance helps event managers handle the additional workload of collecting data. This promotes a higher quality of the data provided as does conducting an internal analysis and holding a benchmarking meeting. Therefore, all actors involved should agree on a coherent timetable in advance.

Finally, it is important to search for comparable event types that are similar in size and location as well as in programming and staging, as fundamental differences between event types may impede any meaningful comparison of indicators.

## **Conclusion**

The study describes a management tool for sustainability benchmarking and assesses its applicability for events on the basis of existing literature and a practical benchmarking project covering four participating events. Given the current lack of experience of adopting such approaches for events, the sustainability benchmarking framework for events needs to account

for management specifications, such as the common one-year cycle of events, limited resources for data collection and the availability of data. Furthermore, it is important to collect the data in a coherent way and to use reference figures, such as visitor numbers, the duration of the event or the size of the event location. The selection of benchmarking objectives might differ between benchmarking projects due to the aim of the participating events; but to concentrate on sustainability performance, a combination of at least two dimensions of sustainability is essential.

The framework presented here proved to assist event managers and researchers in the consideration and promotion of sustainability issues in the event industry and to improve the sustainability performance of events. Further benchmarking projects should be conducted to fine-tune the framework and to test its applicability through a range of event types. In addition, there is still limited experience with sustainability performance indicators in general. Common sustainability performance measurement systems are usually not suitable for benchmarking projects because the proposed indicators display rather general information about the sustainability performance. For benchmarking, indicators have to describe a concrete process or the result of a measure. Again, further projects will help to develop and define adequate indicators and increase experiences handling the indicators.

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