

15. Sustainability and Social Issues in Management

Competitive Session

**Good Vibrations! Co-Creating sustainable events through multi-stakeholder
involvement**

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Good Vibrations! Co-Creating sustainable events through multi-stakeholder involvement**ABSTRACT**

The present paper explores some of the issues encompassing the management and staging of sustainable events. Despite the growing importance of a 'triple bottom line' approach to event research, limited research has been carried out on the collaborative process of creating economic, social and environmental benefits. The aim of this paper is to apply Service-Dominant Logic to develop a deeper understanding of the sustainability of events by exploring value creation as a result of multi-stakeholder participation and involvement. Using data collected during the Melt!-Festival 2011 in Germany we show how different event stakeholders contribute to the creation of value in terms of economic, social and environmental impacts and discuss ways of involving stakeholders more effectively in co-creation processes regarding sustainability.

Keywords: sustainability, triple bottom line, values, environmental issue

INTRODUCTION

Resource depletion, environmental damage caused by events and the mounting pressure of event stakeholders have given impetus to driven sustainability and related thinking in event management. Besides providing a unique event experience event organizers are responsible for their impact on society and the natural environment.

In the last two decades there have been numerous efforts on integrating the concept of sustainability into event management and planning. Besides the development of sustainable event concepts and event management practices (Gration, Arcodia, Raciti, & Stokes, 2011; Laing, & Frost, 2010; Dickson, & Arcodia, 2010; Ensor, Robertson, & Ali-Knight, 2011; Andersson, & Getz, 2008) literature has dealt with the evaluation of the impacts of events from a sustainability perspective applying the triple bottom line (TBL) (Andersson, & Lundberg, 2013; Fairley, Tyler, Pamm, & D'Elia 2010; Hede, 2007; Sherwood, 2007; Fredline, Raybould, Jago, & Deery, 2005). The rationale behind TBL evaluation is to foster sustainability through planning and management practices that promote positive social, environmental and economic impacts and ameliorate negative ones (Sherwood, 2007, Fredline et al., 2005). While there is a growing amount of studies that concentrate on analyzing event impacts through the lens of the TBL (Andersson, & Lundberg, 2013; Fairley et al., 2010; Sherwood, 2007), there has been little research examining how different event stakeholders contribute to the value-creation and value destruction processes that yield these impacts (Andersson, & Getz, 2008). To understand these processes we have to consider that events involve a range of stakeholders (e.g. event organizer, regional enterprises, event visitors) that interact within so called value networks (Stabell, & Fjeldstad, 1998) to exchange service and co-create value (Lusch, Vargo, & Tanniru 2010). Hence, the event and its outcomes are not only the result of the organizer's activities, rather they are created through the interaction of the stakeholders that are involved in the event value network.

The purpose of this paper is to provide a more complete understanding of the management of sustainable events by (1) exploring how different stakeholders of the event value network contribute to the creation of economic, social and environmental impacts and (2) identifying ways of involving

these stakeholders more effectively in co-creation processes regarding sustainability. In order to investigate stakeholders as an active part in creating sustainable events, the present article follows the Service Dominant logic (S-D logic) paradigm which recognizes value creation as an all-encompassing process, including activities by suppliers, customers and possible other actors such as the media or society in general (Williams, & Aitken, 2011). Moreover, a comprehensive event impact analysis was carried out at the 'Melt!-Festival 2011' in Germany to reveal the co-creation processes affecting the sustainability of events from a multi-stakeholder perspective. The empirical study includes surveys and interviews with visitors, the host community and the event organizer.

LINKING SERVICE-DOMINANT LOGIC AND SUSTAINABLE EVENTS

Events are created within value networks, which can be described as temporal structures of largely loosely coupled value proposing social and economic actors that interact with each other to exchange service and co-create value (Lusch, Vargo, & Tanniru 2010). The prerequisite for service-exchange is that actors are seeking access to resources (Hunt, & Morgan, 1995) which will be bundled to create service offerings for other actors. According to S-D logic service is defined as “the application of specialized competences (knowledge and skills) for the benefit of another entity or the entity itself” (Vargo, & Lusch, 2004, p. 2). For example, if an actor A (e.g. event organizer) uses a service offering from actor B (e.g. musician, rock band) while applying its specific resources (e.g. knowledge and skills, social network), he creates value from this service offering for himself and/or for other actors (e.g. selling many event tickets, providing an attractive music programme for event visitors). Combining these observations it becomes apparent that things in themselves have no inherent value and, thus, firms can only make value propositions that must be accepted by someone who derives value from the use of that service offering (Williams, & Aitken, 2011). That means, that each party needs (depends on) the other in order to create value for themselves Hence, mutual dependency and reciprocity are essential for the co-creation of value (Williams, & Aitken, 2011).

However, a service provider's actions does not always result in value co-creation, but can also lead to value co-destruction by making an actor worse off (e.g., Echeverri, & Skålen, 2011; Plé, & Cáceres, 2010). Although the musicians engaged by the festival provider may co-create value with their fans at

the festival they may also co-destruct value by causing inconvenience for the host community through noise.

This perspective aligns with the initial concept of the TBL, which refers to corporations and their capacity to create or destroy value or values within the economic, social and environmental dimensions (Elkington, 1997). To assure sustainability of events it is crucial to strike a balance between the values of the event organization and the values of the event stakeholders (e.g. event visitors, host community). This requires event organizers to consider the economic, social and environmental dimensions of their business activities as well as the value co-creation processes linked to these activities.

Economic value can be created when enterprises (e.g. retailers, hotels, museums) of the host region make service offerings to event visitors (e.g. souvenirs, hotel rooms, art exhibitions) or the event organizer (e.g. technical equipment, location, catering), which are then used by the beneficiaries to create individual value. More precisely, event organizers and event visitors spend money for the service offerings made by the stakeholders of the host community to co-create value. This money finally generates the economic impact which can be defined as the net economic change in the host region attributed to event related spending (Crompton, 1995). To raise the sustainability of events in terms of economic benefits event organizers should aim at building regional value chains for events. If more regional suppliers are involved in the staging of events more event expenditures can be retained in the region. Moreover, it is necessary to locate means by which local enterprises can cultivate event visitors spending and lengthen visitor stays (Chalip, 2004; O'Brien, & Chalip, 2007). This can be realized by using theming strategies, offering retailing and tourism specials or creating additional side events in the host region. Enterprises with the greatest potential are those that provide attractive service offerings for event visitors such as restaurants, hoteliers, retailers and tourism providers (Chalip, & Leyns, 2002).

To co-create sustainability on the social dimension the event organizer needs to involve the host community in the event, enabling exchange processes between the host community and other event stakeholders (e.g. event visitors, artists/musicians). According to Chalip (2006) event related co-creation processes yield social value when they are able to contribute to a sense of celebration and

communitas. For example, this may be achieved by enabling sociability between event visitors and the host community, applying theming strategies or creating ancillary events (O'Brien, 2007). Furthermore, the co-creation of social value can be facilitated when the event organizer involves the host community in the planning and management of the event. This may raise trust in the event organizer and contribute to balancing the interests of both parties and building consensus (Laing, & Frost, 2010). Since inconveniences of the event, such as noise, litter and traffic disturbance, may not be totally prevented it is important that social benefits created by the event outweigh social costs. Social exchange theory posits that it is likely that the host community derives value from the event when the perceived rewards equal residents' willingness to tolerate the inconveniences (Cheng, & Jarvis, 2010; Andriotis, & Vaughan, 2003; Waitt, 2003).

The third dimension of sustainability refers to the environmental impacts of events. Research indicates that the co-creation processes within the event value network lead to a range of negative environmental impacts (e.g. carbon emissions from travel to and from event, waste, soil erosion) for the host community as well as the society at large (Andersson, & Lundberg, 2013; Bottrill, Liverman & Boykoff, 2010). Creating environmental sustainability requires a willingness of all event stakeholders (e.g. host community, event visitors, sponsors, venues and government agencies) to respect the environment and engage in co-creation-processes that minimize environmental harm and promote environmentally friendly events. The event organizer can stimulate this process by offering value propositions that animate stakeholders to take an active role in co-creating environmentally sustainable events. For example, the event organizer might offer discounts to event visitors to reduce carbon emissions (e.g. when travelling in multi-occupied vehicles or when using public transport) and apply green theming to animate event visitors to contribute to waste management, water and energy reduction as well as the usage of regenerative energies. The event may also provide a platform for the presentation and sale of food and beverages aligning with the green theme (e.g. organic food, fair trade) (Laing, & Frost, 2010) as well as for environmental organizations and initiatives to raise awareness on sustainability issues and present their activities to event visitors and other stakeholders. Regarding the companies involved in the events' value chain event organizers should strive for

building partnerships with regional suppliers to source local produce, where possible, e.g. for catering purposes or event production (Dickson, & Arcodia 2010; Laing, & Frost, 2010).

DATA COLLECTION

The subject of investigation was the Melt! Festival 2011 (3-day festival; about 24.000 visitors) in Germany and its host region Anhalt-Dessau-Wittenberg. To investigate how the exchange processes between different stakeholders of the event value network contributed to the co-creation and co-destruction of value in terms of economic, social and environmental impacts a comprehensive event impact analysis was carried out at the 'Melt!-Festival 2011' in Germany. First, we conducted a visitor expenditure survey at the venue in order to estimate spending impacts emerging from co-creation processes between event visitors and regional enterprises. The survey was carried out on the last day of the festival to cover expenditures for the whole stay. A total of 503 surveys were deemed usable (50.3% female; average age: 24.4). Second, we obtained data on the organizer's expenditures and revenues and, thus, on the co-creation processes between regional enterprises and the event organizer. The information derived from the survey results and the festival organizer served as primary input to the regional economic model. Third, the social value of the event was determined by conducting 60 personal interviews with residents of the host region (61.7% female; average age: 51.9). Measuring the perceived social impacts for the host community, the residents' impact perception scale of Fredline, Jago and Deery (2003) was adapted to the context and shortened. Fourth, we carried out an interview with the event organizer to analyze the co-creation processes determining the environmental impacts of the festival.

RESULTS

Economic Impacts

The study gives evidence that both, the festival organizer and the event visitors, contributed to the co-creation of economic value by accepting value propositions (e.g. festival location, exhibition, food) offered by enterprises of the host region. Due to these co-creation processes new money in the amount of 1,56 million Euros was injected into the host region. As Table 1 indicates, this includes festival

organizer's expenditures of largely 215,000 Euros as well as visitors expenditures of roughly 123,000 Euros within the festival area and 1,22 million Euros in the host region.

Insert Table 1 about here

The results reveal that the economic value mainly derives from co-creation processes between event visitors and regional enterprises. The exchange processes between the festival organizer and regional suppliers have been found to make only a small contribution to the economic impacts of the Melt! Festival. This is due to the high proportion of supraregional and national enterprises involved in the production of the event. While 90% of the event production costs accrued outside of the host region only 10% of the costs were turned over in the host region.

The economic impacts of the investigated festival are summarized in Table 2. The base component for the regional economic model developed to calculate the economic benefits comprises the event related expenditures of the festival visitors and the event organizer in the host region. According to economic impact analysis there are three elements that contribute to the total impact referred to as direct, indirect and induced impacts (Crompton, 1995). These impacts mark different levels in the value creation process and can be reported for sales and income. It can be demonstrated that the reciprocal exchange between regional enterprises, the festival organizer and event visitors generated a sales impact of 1,7 million Euros and an income impact of 1,3 million Euros for the host region. As indicated above, visitors' expenditures create the lion's share of these benefits.

Insert Table 2 about here

Social Impacts

Within the social impact analysis it was investigated if residents engage in co-creation processes with the festival and its stakeholders. First, they were asked whether they support staging the festival in their community. Table 3 shows that residents appreciate that the festival is held in their community, but are not willing to actively support the festival by visiting it or by volunteering at the festival.

Insert Table 3 about here

Although not actively participating in the festival, the host community can be involved in co-creation processes (e.g. when festival visitors come to shops and restaurants in the host community) or co-destruction processes (e.g. when event visitors create waste or noise, that affect the quality of life of residents) occurring within the festival value network. To gain information on the social impacts resulting from these exchange processes residents were first asked, if they agreed or disagreed on the occurrence of a phenomenon (Part A). If residents perceived that the impact had occurred they were requested to indicate the effect on their personal quality of life (Part B). The results in Table 4 (Part A) reveal that the majority of residents agreed upon the occurrence of social benefits while less agreement was found regarding the social costs.

Insert Table 4 about here

From the perspective of the host community the festival created community pride and offered diverse social opportunities (e.g. visit of friends and family, meeting new people and cultural exchange). Hence, it can be assumed that the festival promoted a sense of *communitas*. Moreover, the festival was perceived as beneficial for the economy and the image of the host region. Our findings further demonstrate that the festival caused some inconveniences including increased litter and noise, environmental harm as well as the disruption of daily routines of residents. However, the social costs had a smaller effect on the quality of life of local residents than the social benefits (see Table 4, Part B). Hence, it is likely that the social value that has been created through the event equals residents' willingness to tolerate the inconveniences.

Environmental impacts

The interview, that has been conducted with the event organizer, revealed that the festival organization pursues the goal of hosting an environmentally sustainable event. With the launch of the environmental initiative M!Eco in 2010 the event organizer has developed special value propositions in order to engage event visitors in co-creation processes towards an environmentally friendly event. In 2010 the focus has been put on “mobility” as this is one of the main sources for environmental

harm. To reduce carbon emissions arising from event related travel the event organizer installed a webpage for festival goers to build car-pools and offered supersaver train tickets in collaboration with Deutsche Bahn. Moreover, the Melt! Festival Hotel Train, a special train which operates as a means of transport and simultaneously serves as accommodation during the festival weekend, has been introduced in 2010 (see Figure 1). All value propositions focussing on mobility issues have been accepted by the festival visitors. Since its launch, the Melt! Train has been fully booked with 600 tickets. Each festival visitor choosing the Melt! Train instead of a car reduces his or her carbon footprint by half (i.e. carbon emissions are reduced from 64 kg to 31 kg per person). Furthermore, visitors arriving with Deutsche Bahn as well as visitors participating in a car pool have increased since the introduction of M!Eco. This shows that festival visitors actively engage in co-creation processes that aim at producing an environmentally sustainable event.

Insert Figure 1 about here

Besides the mobility programme, the event organizer initiated actions in the field of waste management, catering and educational advertising towards sustainability. Due to the installation of a garbage deposit 70% of the festival goers brought back their garbage in 2010. By handing in a filled bin-liner, festival visitors receive a 5 Euro refund or an exclusive and eco-friendly bag. Conditions on waste management have also been placed for caterers at the festival site. This includes using compostable dishes and donating left overs to regional free food programmes (e.g. Wittenberger Tafel e.V.). Furthermore, the event organizer promotes collaboration with regional suppliers as well as suppliers of organic food to reduce food miles and offer more carbon friendly and healthier food. Since the implementation of M!Eco in 2010, the Melt! Festival also serves as platform for environmental initiatives to raise funds for various charities and to do educational advertising to encourage sustainable behaviour.

In 2011 the environmental programme M!Eco focused on “energy” while carrying forward the activities implemented in 2010. In collaboration with a regional enterprise for photo-voltaic systems the festival organizer and the location provider installed a solar panel on the roof of different buildings at the festival site. Hence, the Melt! Festival 2011 could be partly supplied by solar energy. In addition

to using solar power other innovative concepts of energy regeneration have been implemented in 2011. This includes the “Electric Hotel”, a mobile power station which enables to charge mobile phones 100% carbon free via solar panels, wind power and generator bikes (see Figure 2). Besides handing in their mobile phones festival goers were encouraged in co-creation processes by pedaling on the generator bikes.

Insert Figure 2 about here

Furthermore, artists performing at the festival are involved in co-creation processes on the environmental dimension. In 2011 the festival launched a code of practice for musicians and bands with guidelines for a climate-friendly tour. Additionally, the event organizer organized a side event, the so-called “Green Melt! Dinner”, to connect different festival stakeholders (e.g. regional institutions and enterprises, stakeholders from the festival and music industry, sustainability experts etc.) to discuss current challenges and opportunities regarding sustainable events. The Dinner was visited by 100 international guests.

Overall, the results of the interview show that the festival organizer succeeds in engaging different stakeholders of the event value network (e.g. event visitors, caterers, musicians, environmental initiatives, regional stakeholders) in co-creation processes towards environmental sustainability.

CONCLUSIONS AND IMPLICATIONS

This study employed the mindset of Service-Dominant Logic to provide a deeper understanding on the co-creation of sustainable events. In particular, this paper analyzed the exchange processes between the different stakeholders of the event value network to explore how they contribute to the co-creation and co-destruction of value in terms of economic, social and environmental impacts. Therefore, a comprehensive event impact analysis was carried out at the ‘Melt!-Festival 2011’ in Germany.

Our findings give evidence that the sustainability of events is achieved in a many-to-many logic depending on a range of stakeholders that are involved in the co-creation and co-destruction of economic, social and environmental value of festivals.

First, our research indicates that value co-creation processes between regional stakeholders (e.g. regional enterprises, restaurants, hotels), festival tourists and the festival organizer can yield economic benefits for the host region. The study revealed that the co-creation-processes between these stakeholders generated a sales impact of 1,3 million Euro and an income impact of 1,7 million Euros. This impact mainly derived from co-creation processes between festival visitors and regional stakeholders while there has been hardly any exchange between the festival organizer and regional stakeholders. To raise the economic benefits the event organizer should strive to involve as many regional enterprises as possible in the staging of the festival to retain expenditures in the region. If single regional enterprises are not capable to offer value propositions that meet the needs of the event organizer it should be investigated if two or more enterprises can co-produce an appropriate service offering to meet the demand.

Second, our study reveals that co-creation processes involving festival stakeholders (e.g. event visitors, event organizer) and the host community can contribute to the development of social value in the host region. Although the majority of the residents were not willing to visit or volunteer at the festival they perceived social value because the event was held in their community. This is mainly due to the fact, that the festival created community pride, offered opportunities for social and cultural exchange and stimulated the region's economy and tourism. The inconveniences caused within the event value network (e.g. noise, litter, disruption of daily routines) had a lower effect on the quality of life on local residents than the benefits, which indicates that the social benefits outweigh social costs. Nevertheless, to minimize value co-destruction on the social dimension the festival organizer can intensify collaboration with the host community through vehicles such as round tables in order to promote communication, build consensus and reduce conflict. Moreover, social value can be enhanced through creating an atmosphere of celebration in the host region as this facilitates the integration of residents in the festival.

Third, our findings show that the festival organizer can engage the stakeholders of the event value network (e.g. event visitors, caterers, musicians, environmental initiatives, regional stakeholders) in co-creation processes towards environmental sustainability by offering adequate value propositions. The festival organizer of Melt! offered value propositions regarding different spheres of activity (e.g.

mobility, energy, waste management, catering) to festival visitors, artists, environmental initiatives and regional suppliers that have been accepted and realized by these stakeholders. Hence, a range of event stakeholders could be successfully involved in the development and staging of an eco-friendly festival.

Apart from the stakeholders addressed in this research, there may be other actors in the event value network (e.g. media, sponsors) that may contribute to the sustainability of events. Overall, it seems to be a clear consequence that the development and staging of sustainable events requires a multi-stakeholder perspective that acknowledges that the event organizer needs to engage in co-creation processes with the host community, event visitors, suppliers, venues, government agencies etc. and build sustainable relationships with these groups.

REFERENCES

- Andersson, T. D. & Getz, D. (2008): Stakeholder Management Strategies of Festivals. *Journal of Convention & Event Tourism*, 9(3), 199–220.
- Andersson, T. D. & Lundberg, E. (2013): Commensurability and Sustainability: Triple Impact Assessments of a Tourism Event. *Tourism Management*, 37, 99-109.
- Andriotis, K. & Vaughan, R. D. (2003): Urban Residents' Attitudes toward Tourism Development: The Case of Crete. *Journal of Travel Research*, 42(2), 172–185.
- Bottrill, C., Liverman, D. & Boykoff, M. (2010): Carbon Soundings: Greenhouse Gas Emissions of the UK Music Industry. *Environmental Research Letters*, 5(1), 14019.
- Chalip, L. (2004). Beyond impact: a general model for sports event leverage. In B. W. Ritchie & D. Adair (Eds.), *Sport tourism: interrelationships, impacts and issues* (226-252). Clevedon, UK, Channel View Publications.
- Chalip, L. (2006). Towards Social Leverage of Sport Events. *Journal of Sport & Tourism*, 11(2), 109-127.
- Chalip, L. & Leyns, A. (2002): Local Business Leveraging of a Sport Event: Managing an Event for Economic Benefit, *Journal of Sport Management*, 16(2), 132–158.
- Cheng, E. & Jarvis, N. (2010): Residents' Perception of the Social-Cultural Impacts of the 2008 Formula 1 singtel Singapore Grand Prix. *Event Management*, 14(2), 91–106.
- Crompton, J. (1995). Economic Impact Analysis of Sports Facilities and Events: Eleven Sources of Misapplication. *Journal of Sport Management*, 34(9), 14–35.
- Dickson, C. & Arcodia, C. (2010): Promoting Sustainable Event Practice: The Role of Professional Associations. Special Issue on Event Studies. *International Journal of Hospitality Management*. 29(2), 236-244.
- Echeverri, P. & Skålen, P. (2011): Co-creation and co-destruction: A practice-theory based study of interactive value formation. *Marketing Theory* 11(3), 351-373.
- Elkington, J. (1997): *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Oxford.

- Ensor, J.; Robertson, M. & Ali-Knight, J. (2011): Eliciting the Dynamics of Leading a Sustainable Event: Key Informant Responses. *Event Management*, 15(4), 315–327.
- Fairley, S.; Tyler, B. D.; Pamm, K. & D'Elia, K. (2011): The Formula One Australian Grand Prix: Exploring the Triple Bottom Line. *Sport Management Review*, 14(2), 141–152.
- Fredline, L.; Raybould, M.; Jago, L. & Deery, M. (2005): Triple Bottom Line Event Evaluation: A Proposed Framework for Holistic Event Evaluation, in: Allen, J. (Ed.): *Third International Event Conference, The Impacts of Events*, Sydney, Australia, 2–15.
- Fredline, E., Jago, L. & Deery, M. (2003). The Development of a Generic Scale to Measure the Social Impacts of Events. *Event Management*, 8(1), 23–37.
- Gration, D.; Arcodia, C.; Raciti, M. & Stokes, R. (2011): The Blended Festivalscape and its Sustainability at Nonurban Festivals. *Event Management*, 15(4), 343-359.
- Hede, A.-M. (2007): Managing Special Events in the new Era of the Triple Bottom Line. *Event Management*, 11(1-2), 13-22.
- Lusch, R. F., Vargo, S. L., & Tanniru, M. (2010). Service, value networks and learning. *Journal of the Academy of Marketing Science*, 38(1), 19–31.
- O'Brien, D. (2006). Event Business Leveraging: The Sydney 2000 Olympic Games. *Annals of Tourism Research*, 33(1), 240-261.
- O'Brien, D. (2007): Points of Leverage: maximising Host Community Benefit from a Regional Surfing Festival. *European Sport Management Quarterly*, 7(2), 141–165.
- O'Brien, D. & Chalip, L. (2007): Executive Training Exercise in Sport Event Leverage. *International Journal of Culture, Tourism and Hospitality Research*. 1(4), 296–304.
- Plé, L. & Cáceres, R. C. (2010): Not always co-creation: introducing interactional co-destruction of value in service-dominant logic. *Journal of Services Marketing*, 24(6), 430-437.
- Sherwood, P. (2007): A Triple Bottom Line Evaluation of the Impact of Special Events: The Development of Indicators, PhD thesis, Victoria University, Melbourne.
- Stabell, C. B. & Fjeldstad, O. D. (1998). Configuring Value for Competitive Advantage: On Chains, Shops, and Networks. *Strategic Management Journal*, 19(5), 413–437.

- Vargo, S. L. & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10.
- Vargo, S. L. & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1–17.
- Waitt, G. (2003): Social Impacts of the Sydney Olympics. *Annals of Tourism Research*, 30(1), 194–215.
- Williams, J. & Aitken, R. (2011): The service-dominant logic of marketing and marketing ethics. *Journal of business ethics*, 102, 439-454.

TABLES AND FIGURES

Table 1: Event related spending in the host region

Expenditures in the host region	in Euro
Visitors' expenditures	1,348,796.20
Expenditures within festival area (e.g. food, beverages, merchandising)	123,301.77
Expenditures outside festival area (e.g. shopping, restaurants, sightseeing, lodging etc.)	1,225,494.43
Event organizer's expenditures (e.g. rental fee, catering, logistics)	215,093.11
Total	1,563,889.31

Table 2: Economic impacts for the host region

Impacts generated from event related spending in the host region				
	direct impact	indirect impact	induced impact	total
sales impacts	810,627 €	448,191 €	446,937 €	1,705,755 €
income impacts	612,834 €	338,833 €	337,884 €	1,289,551 €

Table 1: Statements measuring the support of the festival by the host community

	M/ SD
I think it is good, that the Melt! Festival is held in this area.	4.72/ .58
I am going to visit the Melt! Festival next year.	1.72/ 1.32
I usually leave the area during the Melt! Festival (e.g. holidays, day trip).	1.05/ .28
I can imagine supporting the Melt! Festival as a volunteer.	1.84/ 1.49

Notes: *The statements were rated using a 5-point rating scale ranging from 1 'strongly disagree' to 5 'strongly agree'

Table 2: Social impacts of the festival for the host community

	occurrence of impact (Part A)			effect on personal quality of life (Part B) (M/ SD)
	agree	disagree	don't know	
Social benefits				
entertainment opportunities	93.3%	6.7%	0.0%	3.84/ .85
stimulation of economy and tourism	93.3%	6.7%	0.0%	3.57/ .84
opportunity to meet new people	90.0%	8.3%	1.7%	3.83/ .94
community pride	76.7%	15.0%	8.3%	4.04/ .87
reduction of prejudice against the host region	68.3%	18.3%	13.3%	3.71/ .93
cultural exchange between tourists and residents	48.3%	38.3%	13.3%	3.86/ .92
sense of togetherness within community	21.7%	68.3%	10.0%	4.31/ .75
visit of friends and relatives	13.3%	86.7%	0.0%	4.50/ .76
Social costs				
increased litter	51.7%	48.3%	0.0%	2.74/ 1.01
disruption of daily routines of residents	48.3%	50.0%	1.7%	2.62/ .77
increased noise levels	41.7%	56.7%	1.7%	2.64/ .71
environmental harm	31.7%	63.3%	5.0%	2.47/ .73
overcrowding	8.3%	91.7%	0.0%	2.60/ .55
increased prices for goods and services	6.7%	88.3%	5.0%	2.25/ 2.36
crime and vandalism	6.7%	93.3%	0.0%	2.00/ .58
overall impact of the festival				3.27/ .76

Notes: Impacts in Part B were measured using a five point rating scale ranging from 1 'very negative' to 5 'very positive'

Figure 1: Melt! Train

Source: <http://www.juliesbicycle.com/resources/case-studies/festivals/melt!>

Figure 2: Electric Hotel at Melt! Festival



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INTRODUCTION

Resource depletion, environmental damage caused by events and the mounting pressure of event stakeholders have given impetus to driven sustainability and related thinking in event management. Besides providing a unique event experience event organizers are responsible for their impact on society and the natural environment.

In the last two decades there have been numerous efforts on integrating the concept of sustainability into event management and planning. Besides the development of sustainable event concepts and event management practices (Gration, Arcodia, Raciti, & Stokes, 2011; Laing, & Frost, 2010; Dickson, & Arcodia, 2010; Ensor, Robertson, & Ali-Knight, 2011; Andersson, & Getz, 2008) literature has dealt with the evaluation of the impacts of events from a sustainability perspective applying the triple bottom line (TBL) (Andersson, & Lundberg, 2013; Fairley, Tyler, Pamm, & D'Elia 2010; Hede, 2007; Sherwood, 2007; Fredline, Raybould, Jago, & Deery, 2005). The rationale behind TBL evaluation is to foster sustainability through planning and management practices that promote positive social, environmental and economic impacts and ameliorate negative ones (Sherwood, 2007, Fredline et al., 2005). While there is a growing amount of studies that concentrate on analyzing event impacts through the lens of the TBL (Andersson, & Lundberg, 2013; Fairley et al., 2010; Sherwood, 2007), there has been little research examining how different event stakeholders contribute to the value-creation and value destruction processes that yield these impacts (Andersson, & Getz, 2008). To understand these processes we have to consider that events involve a range of stakeholders (e.g. event organizer, regional enterprises, event visitors) that interact within so called value networks (Stabell, & Fjeldstad, 1998) to exchange service and co-create value (Lusch, Vargo, & Tanniru 2010). Hence, the event and its outcomes are not only the result of the organizer's activities, rather they are created through the interaction of the stakeholders that are involved in the event value network.

The purpose of this paper is to provide a more complete understanding of the management of sustainable events by (1) exploring how different stakeholders of the event value network contribute to the creation of economic, social and environmental impacts and (2) identifying ways of involving

these stakeholders more effectively in co-creation processes regarding sustainability. In order to investigate stakeholders as an active part in creating sustainable events, the present article follows the Service Dominant logic (S-D logic) paradigm which recognizes value creation as an all-encompassing process, including activities by suppliers, customers and possible other actors such as the media or society in general (Williams, & Aitken, 2011). Moreover, a comprehensive event impact analysis was carried out at the 'Melt!-Festival 2011' in Germany to reveal the co-creation processes affecting the sustainability of events from a multi-stakeholder perspective. The empirical study includes surveys and interviews with visitors, the host community and the event organizer.

LINKING SERVICE-DOMINANT LOGIC AND SUSTAINABLE EVENTS

Events are created within value networks, which can be described as temporal structures of largely loosely coupled value proposing social and economic actors that interact with each other to exchange service and co-create value (Lusch, Vargo, & Tanniru 2010). The prerequisite for service-exchange is that actors are seeking access to resources (Hunt, & Morgan, 1995) which will be bundled to create service offerings for other actors. According to S-D logic service is defined as “the application of specialized competences (knowledge and skills) for the benefit of another entity or the entity itself” (Vargo, & Lusch, 2004, p. 2). For example, if an actor A (e.g. event organizer) uses a service offering from actor B (e.g. musician, rock band) while applying its specific resources (e.g. knowledge and skills, social network), he creates value from this service offering for himself and/or for other actors (e.g. selling many event tickets, providing an attractive music programme for event visitors). Combining these observations it becomes apparent that things in themselves have no inherent value and, thus, firms can only make value propositions that must be accepted by someone who derives value from the use of that service offering (Williams, & Aitken, 2011). That means, that each party needs (depends on) the other in order to create value for themselves Hence, mutual dependency and reciprocity are essential for the co-creation of value (Williams, & Aitken, 2011).

However, a service provider's actions does not always result in value co-creation, but can also lead to value co-destruction by making an actor worse off (e.g., Echeverri, & Skålen, 2011; Plé, & Cáceres, 2010). Although the musicians engaged by the festival provider may co-create value with their fans at

the festival they may also co-destruct value by causing inconvenience for the host community through noise.

This perspective aligns with the initial concept of the TBL, which refers to corporations and their capacity to create or destroy value or values within the economic, social and environmental dimensions (Elkington, 1997). To assure sustainability of events it is crucial to strike a balance between the values of the event organization and the values of the event stakeholders (e.g. event visitors, host community). This requires event organizers to consider the economic, social and environmental dimensions of their business activities as well as the value co-creation processes linked to these activities.

Economic value can be created when enterprises (e.g. retailers, hotels, museums) of the host region make service offerings to event visitors (e.g. souvenirs, hotel rooms, art exhibitions) or the event organizer (e.g. technical equipment, location, catering), which are then used by the beneficiaries to create individual value. More precisely, event organizers and event visitors spend money for the service offerings made by the stakeholders of the host community to co-create value. This money finally generates the economic impact which can be defined as the net economic change in the host region attributed to event related spending (Crompton, 1995). To raise the sustainability of events in terms of economic benefits event organizers should aim at building regional value chains for events. If more regional suppliers are involved in the staging of events more event expenditures can be retained in the region. Moreover, it is necessary to locate means by which local enterprises can cultivate event visitors spending and lengthen visitor stays (Chalip, 2004; O'Brien, & Chalip, 2007). This can be realized by using theming strategies, offering retailing and tourism specials or creating additional side events in the host region. Enterprises with the greatest potential are those that provide attractive service offerings for event visitors such as restaurants, hoteliers, retailers and tourism providers (Chalip, & Leyns, 2002).

To co-create sustainability on the social dimension the event organizer needs to involve the host community in the event, enabling exchange processes between the host community and other event stakeholders (e.g. event visitors, artists/musicians). According to Chalip (2006) event related co-creation processes yield social value when they are able to contribute to a sense of celebration and

communitas. For example, this may be achieved by enabling sociability between event visitors and the host community, applying theming strategies or creating ancillary events (O'Brien, 2007). Furthermore, the co-creation of social value can be facilitated when the event organizer involves the host community in the planning and management of the event. This may raise trust in the event organizer and contribute to balancing the interests of both parties and building consensus (Laing, & Frost, 2010). Since inconveniences of the event, such as noise, litter and traffic disturbance, may not be totally prevented it is important that social benefits created by the event outweigh social costs. Social exchange theory posits that it is likely that the host community derives value from the event when the perceived rewards equal residents' willingness to tolerate the inconveniences (Cheng, & Jarvis, 2010; Andriotis, & Vaughan, 2003; Waitt, 2003).

The third dimension of sustainability refers to the environmental impacts of events. Research indicates that the co-creation processes within the event value network lead to a range of negative environmental impacts (e.g. carbon emissions from travel to and from event, waste, soil erosion) for the host community as well as the society at large (Andersson, & Lundberg, 2013; Bottrill, Liverman & Boykoff, 2010). Creating environmental sustainability requires a willingness of all event stakeholders (e.g. host community, event visitors, sponsors, venues and government agencies) to respect the environment and engage in co-creation-processes that minimize environmental harm and promote environmentally friendly events. The event organizer can stimulate this process by offering value propositions that animate stakeholders to take an active role in co-creating environmentally sustainable events. For example, the event organizer might offer discounts to event visitors to reduce carbon emissions (e.g. when travelling in multi-occupied vehicles or when using public transport) and apply green theming to animate event visitors to contribute to waste management, water and energy reduction as well as the usage of regenerative energies. The event may also provide a platform for the presentation and sale of food and beverages aligning with the green theme (e.g. organic food, fair trade) (Laing, & Frost, 2010) as well as for environmental organizations and initiatives to raise awareness on sustainability issues and present their activities to event visitors and other stakeholders. Regarding the companies involved in the events' value chain event organizers should strive for

building partnerships with regional suppliers to source local produce, where possible, e.g. for catering purposes or event production (Dickson, & Arcodia 2010; Laing, & Frost, 2010).

DATA COLLECTION

The subject of investigation was the Melt! Festival 2011 (3-day festival; about 24.000 visitors) in Germany and its host region Anhalt-Dessau-Wittenberg. To investigate how the exchange processes between different stakeholders of the event value network contributed to the co- creation and co- destruction of value in terms of economic, social and environmental impacts a comprehensive event impact analysis was carried out at the ‘Melt!-Festival 2011’ in Germany.

First, we conducted a visitor expenditure survey at the venue in order to estimate spending impacts emerging from co-creation processes between event visitors and regional enterprises. The survey was carried out on the last day of the festival to cover expenditures for the whole stay. A total of 503 surveys were deemed usable (50.3% female; average age: 24.4).

Second, we obtained data on the organizer’s expenditures and revenues and, thus, on the co-creation processes between regional enterprises and the event organizer. The information derived from the survey results and the festival organizer served as primary input to the regional economic model.

Third, the social value of the event was determined by conducting 60 personal interviews with residents of the host region (61.7% female; average age: 51.9). Measuring the perceived social impacts for the host community, the residents’ impact perception scale of Fredline, Jago and Deery (2003) was adapted to the context and shortened. The residents’ impact perception scale consists of three parts as shown in Table 1.

Insert Table 1 about here

First, residents are asked whether they believe if an impact had occurred because of the event and to indicate the direction of the impact. If residents perceive a change because of the event they are asked to assess the effect on their personal quality of life and the community as a whole. However, with some phenomena it is not possible to indicate a movement in the opposite direction or to find a proper

wording (e.g. “The festival provides the opportunity to meet new people”). Therefore, we reverted to the more traditional method of asking respondents to agree or disagree with a biased statement signifying a change in a specific direction (Fredline, 2000). Although there are differences in the format, the results are fairly comparable since an agreement of the respondents indicates a change in the direction of the statement, while disagreement is roughly equivalent to the “no change” option. Furthermore, we modified the residents’ impact perception scale by excluding the effects on the community as a whole because we were interested in the personal perspective of the residents.

The scale of Fredline, Jago and Deery (2003) includes 45 impact statements. Not all impacts applied to the Melt! Festival. Furthermore, the combination of the survey method and the extensive item battery causes a high complexity for the respondents and, thus, bears the risk of a low return rate. For these reasons we decided to shorten the item battery using an expert group. As a result of this process 17 items were deemed relevant for the investigated festival.

Fourth, we carried out an interview with the event organizer to analyze the co-creation processes determining the environmental impacts of the festival. To validate the data collected in the interview, the results were compared to the perspective of the host community. Therefore, we used the social impact survey which also included data on the environmental impacts of the festival on the personal quality of life of the residents. Furthermore, the results of an environmental impact study carried out at the Melt!-Festival 2010 served as a data source.

RESULTS

Economic Impacts

The study gives evidence that both, the festival organizer and the event visitors, contributed to the co-creation of economic value by accepting value propositions (e.g. festival location, exhibition, food) offered by enterprises of the host region. Due to these co-creation processes new money in the amount of 1,56 million Euros was injected into the host region. As Table 1 indicates, this includes festival organizer’s expenditures of largely 215,000 Euros as well as visitors expenditures of roughly 123,000 Euros within the festival area and 1,22 million Euros in the host region.

Insert Table 2 about here

The results reveal that the economic value mainly derives from co-creation processes between event visitors and regional enterprises. The exchange processes between the festival organizer and regional suppliers have been found to make only a small contribution to the economic impacts of the Melt! Festival. This is due to the high proportion of supraregional and national enterprises involved in the production of the event. While 90% of the event production costs accrued outside of the host region only 10% of the costs were turned over in the host region.

The economic impacts of the investigated festival are summarized in Table 2. The base component for the regional economic model developed to calculate the economic benefits comprises the event related expenditures of the festival visitors and the event organizer in the host region. According to economic impact analysis there are three elements that contribute to the total impact referred to as direct, indirect and induced impacts (Crompton, 1995). These impacts mark different levels in the value creation process and can be reported for sales and income. It can be demonstrated that the reciprocal exchange between regional enterprises, the festival organizer and event visitors generated a sales impact of 1,7 million Euros and an income impact of 1,3 million Euros for the host region. As indicated above, visitors' expenditures create the lion's share of these benefits.

Insert Table 3 about here

Social Impacts

Within the social impact analysis it was investigated if residents engage in co-creation processes with the festival and its stakeholders. First, they were asked whether they support staging the festival in their community. Table 3 shows that residents appreciate that the festival is held in their community, but are not willing to actively support the festival by visiting it or by volunteering at the festival.

Insert Table 4 about here

Although not actively participating in the festival, the host community can be involved in co-creation

processes (e.g. when festival visitors come to shops and restaurants in the host community) or co-destruction processes (e.g. when event visitors create waste or noise, that affect the quality of life of residents) occurring within the festival value network. To gain information on the social impacts resulting from these exchange processes residents were first asked, if they agreed or disagreed on the occurrence of a phenomenon (Part A). If residents perceived that the impact had occurred they were requested to indicate the effect on their personal quality of life (Part B). The results in Table 4 (Part A) reveal that the majority of residents agreed upon the occurrence of social benefits while less agreement was found regarding the social costs.

Insert Table 5 about here

From the perspective of the host community the festival created community pride and offered diverse social opportunities (e.g. visit of friends and family, meeting new people and cultural exchange). Hence, it can be assumed that the festival promoted a sense of *communitas*. Moreover, the festival was perceived as beneficial for the economy and the image of the host region. Our findings further demonstrate that the festival caused some inconveniences including increased litter and noise, environmental harm as well as the disruption of daily routines of residents. However, the social costs had a smaller effect on the quality of life of local residents than the social benefits (see Table 4, Part B). This can also be confirmed when consulting the overall impact (mean: 3.27) which reveals that the host community perceived a rather positive impact of the festival on their quality of life. Hence, it is likely that the social value that has been created through the event equals residents' willingness to tolerate the inconveniences.

Environmental impacts

The interview, that has been conducted with the event organizer, revealed that the festival organization pursues the goal of hosting an environmentally sustainable event. With the launch of the environmental initiative M!Eco in 2010 the event organizer has developed special value propositions in order to engage event visitors in co-creation processes towards an environmentally friendly event. In 2010 the focus has been put on "mobility" as this is one of the main sources for environmental

harm. To reduce carbon emissions arising from event related travel the event organizer installed a webpage for festival goers to build car-pools and offered supersaver train tickets in collaboration with Deutsche Bahn. Moreover, the Melt! Festival Hotel Train, a special train which operates as a means of transport and simultaneously serves as accommodation during the festival weekend, has been introduced in 2010 (see Figure 1). All value propositions focussing on mobility issues have been accepted by the festival visitors. Since its launch, the Melt! Train has been fully booked with 600 tickets. Each festival visitor choosing the Melt! Train instead of a car reduces his or her carbon footprint by half (i.e. carbon emissions are reduced from 64 kg to 31 kg per person). Furthermore, visitors arriving with Deutsche Bahn as well as visitors participating in a car pool have increased since the introduction of M!Eco. This shows that festival visitors actively engage in co-creation processes that aim at producing an environmentally sustainable event.

Insert Figure 1 about here

Besides the mobility programme, the event organizer initiated actions in the field of waste management, catering and educational advertising towards sustainability. Due to the installation of a garbage deposit 70% of the festival goers brought back their garbage in 2010. By handing in a filled bin-liner, festival visitors receive a 5 Euro refund or an exclusive and eco-friendly bag. Conditions on waste management have also been placed for caterers at the festival site. This includes using compostable dishes and donating left overs to regional free food programmes (e.g. Wittenberger Tafel e.V.). Furthermore, the event organizer promotes collaboration with regional suppliers as well as suppliers of organic food to reduce food miles and offer more carbon friendly and healthier food. Since the implementation of M!Eco in 2010, the Melt! Festival also serves as platform for environmental initiatives to raise funds for various charities and to do educational advertising to encourage sustainable behaviour.

In 2011 the environmental programme M!Eco focused on “energy” while carrying forward the activities implemented in 2010. In collaboration with a regional enterprise for photo-voltaic systems the festival organizer and the location provider installed a solar panel on the roof of different buildings at the festival site. Hence, the Melt! Festival 2011 could be partly supplied by solar energy. In addition

to using solar power other innovative concepts of energy regeneration have been implemented in 2011. This includes the “Electric Hotel”, a mobile power station which enables to charge mobile phones 100% carbon free via solar panels, wind power and generator bikes (see Figure 2). Besides handing in their mobile phones festival goers were encouraged in co-creation processes by pedaling on the generator bikes.

Insert Figure 2 about here

Furthermore, artists performing at the festival are involved in co-creation processes on the environmental dimension. In 2011 the festival launched a code of practice for musicians and bands with guidelines for a climate-friendly tour. Additionally, the event organizer organized a side event, the so-called “Green Melt! Dinner”, to connect different festival stakeholders (e.g. regional institutions and enterprises, stakeholders from the festival and music industry, sustainability experts etc.) to discuss current challenges and opportunities regarding sustainable events. The Dinner was visited by 100 international guests.

Overall, the results of the interview show that the festival organizer succeeds in engaging different stakeholders of the event value network (e.g. event visitors, caterers, musicians, environmental initiatives, regional stakeholders) in co-creation processes towards environmental sustainability. This could also be evidenced with the social impact survey which showed that a rather small group of residents perceived some slight environmental costs through the festival.

CONCLUSIONS AND IMPLICATIONS

This study employed the mindset of Service-Dominant Logic to provide a deeper understanding on the co-creation of sustainable events. In particular, this paper analyzed the exchange processes between the different stakeholders of the event value network to explore how they contribute to the co-creation and co-destruction of value in terms of economic, social and environmental impacts. Therefore, a comprehensive event impact analysis was carried out at the ‘Melt!-Festival 2011’ in Germany.

Our findings give evidence that the sustainability of events is achieved in a many-to-many logic depending on a range of stakeholders that are involved in the co-creation and co-destruction of economic, social and environmental value of festivals.

First, our research indicates that value co-creation processes between regional stakeholders (e.g. regional enterprises, restaurants, hotels), festival tourists and the festival organizer can yield economic benefits for the host region. The study revealed that the co-creation-processes between these stakeholders generated a sales impact of 1,3 million Euro and an income impact of 1,7 million Euros. This impact mainly derived from co-creation processes between festival visitors and regional stakeholders while there has been hardly any exchange between the festival organizer and regional stakeholders. To raise the economic benefits the event organizer should strive to involve as many regional enterprises as possible in the staging of the festival to retain expenditures in the region. If single regional enterprises are not capable to offer value propositions that meet the needs of the event organizer it should be investigated if two or more enterprises can co-produce an appropriate service offering to meet the demand.

Second, our study reveals that co-creation processes involving festival stakeholders (e.g. event visitors, event organizer) and the host community can contribute to the development of social value in the host region. Although the majority of the residents were not willing to visit or volunteer at the festival they perceived social value because the event was held in their community. This is mainly due to the fact, that the festival created community pride, offered opportunities for social and cultural exchange and stimulated the region's economy and tourism. The inconveniences caused within the event value network (e.g. noise, litter, disruption of daily routines) had a lower effect on the quality of life on local residents than the benefits, which indicates that the social benefits outweigh social costs. Nevertheless, to minimize value co-destruction on the social dimension the festival organizer can intensify collaboration with the host community through vehicles such as round tables in order to promote communication, build consensus and reduce conflict. Moreover, social value can be enhanced through creating an atmosphere of celebration in the host region as this facilitates the integration of residents in the festival.

Third, our findings show that the festival organizer can engage the stakeholders of the event value network (e.g. event visitors, caterers, musicians, environmental initiatives, regional stakeholders) in co-creation processes towards environmental sustainability by offering adequate value propositions. The festival organizer of Melt! offered value propositions regarding different spheres of activity (e.g. mobility, energy, waste management, catering) to festival visitors, artists, environmental initiatives and regional suppliers that have been accepted and realized by these stakeholders. Hence, a range of event stakeholders could be successfully involved in the development and staging of an eco-friendly festival.

Apart from the stakeholders addressed in this research, there may be other actors in the event value network (e.g. media, sponsors) that may contribute to the sustainability of events. Overall, it seems to be a clear consequence that the development and staging of sustainable events requires a multi-stakeholder perspective that acknowledges that the event organizer needs to engage in co-creation processes with the host community, event visitors, suppliers, venues, government agencies etc. and build sustainable relationships with these groups.

REFERENCES

- Andersson, T. D. & Getz, D. (2008): Stakeholder Management Strategies of Festivals. *Journal of Convention & Event Tourism*, 9(3), 199–220.
- Andersson, T. D. & Lundberg, E. (2013): Commensurability and Sustainability: Triple Impact Assessments of a Tourism Event. *Tourism Management*, 37, 99-109.
- Andriotis, K. & Vaughan, R. D. (2003): Urban Residents' Attitudes toward Tourism Development: The Case of Crete. *Journal of Travel Research*, 42(2), 172–185.
- Bottrill, C., Liverman, D. & Boykoff, M. (2010): Carbon Soundings: Greenhouse Gas Emissions of the UK Music Industry. *Environmental Research Letters*, 5(1), 14019.

- Chalip, L. (2004). Beyond impact: a general model for sports event leverage. In B. W. Ritchie & D. Adair (Eds.), *Sport tourism: interrelationships, impacts and issues* (226-252). Clevedon, UK, Channel View Publications.
- Chalip, L. (2006). Towards Social Leverage of Sport Events. *Journal of Sport & Tourism*, 11(2), 109-127.
- Chalip, L. & Leyns, A. (2002): Local Business Leveraging of a Sport Event: Managing an Event for Economic Benefit, *Journal of Sport Management*, 16(2), 132–158.
- Cheng, E. & Jarvis, N. (2010): Residents' Perception of the Social-Cultural Impacts of the 2008 Formula 1 singtel Singapore Grand Prix. *Event Management*, 14(2), 91–106.
- Crompton, J. (1995). Economic Impact Analysis of Sports Facilities and Events: Eleven Sources of Misapplication. *Journal of Sport Management*, 34(9), 14–35.
- Dickson, C. & Arcodia, C. (2010): Promoting Sustainable Event Practice: The Role of Professional Associations. Special Issue on Event Studies. *International Journal of Hospitality Management*. 29(2), 236-244.
- Echeverri, P. & Skålen, P. (2011): Co-creation and co-destruction: A practice-theory based study of interactive value formation. *Marketing Theory* 11(3), 351-373.
- Elkington, J. (1997): *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*, Oxford.
- Ensor, J.; Robertson, M. & Ali-Knight, J. (2011): Eliciting the Dynamics of Leading a Sustainable Event: Key Informant Responses. *Event Management*, 15(4), 315–327.
- Fairley, S.; Tyler, B. D.; Pamm, K. & D'Elia, K. (2011): The Formula One Australian Grand Prix: Exploring the Triple Bottom Line. *Sport Management Review*, 14(2), 141–152.
- Fredline, L.; Raybould, M.; Jago, L. & Deery, M. (2005): Triple Bottom Line Event Evaluation: A Proposed Framework for Holistic Event Evaluation, in: Allen, J. (Ed.): *Third International Event Conference, The Impacts of Events*, Sydney, Australia, 2–15.
- Fredline, E., Jago, L. & Deery, M. (2003). The Development of a Generic Scale to Measure the Social Impacts of Events. *Event Management*, 8(1), 23–37.

- Gratton, D.; Arcodia, C.; Raciti, M. & Stokes, R. (2011): The Blended Festivalscape and its Sustainability at Nonurban Festivals. *Event Management*, 15(4), 343-359.
- Hede, A.-M. (2007): Managing Special Events in the new Era of the Triple Bottom Line. *Event Management*, 11(1-2), 13-22.
- Lusch, R. F., Vargo, S. L., & Tanniru, M. (2010). Service, value networks and learning. *Journal of the Academy of Marketing Science*, 38(1), 19–31.
- O'Brien, D. (2006). Event Business Leveraging: The Sydney 2000 Olympic Games. *Annals of Tourism Research*, 33(1), 240-261.
- O'Brien, D. (2007): Points of Leverage: maximising Host Community Benefit from a Regional Surfing Festival. *European Sport Management Quarterly*, 7(2), 141–165.
- O'Brien, D. & Chalip, L. (2007): Executive Training Exercise in Sport Event Leverage. *International Journal of Culture, Tourism and Hospitality Research*. 1(4), 296–304.
- Plé, L. & Cáceres, R. C. (2010): Not always co-creation: introducing interactional co-destruction of value in service-dominant logic. *Journal of Services Marketing*, 24(6), 430-437.
- Sherwood, P. (2007): A Triple Bottom Line Evaluation of the Impact of Special Events: The Development of Indicators, PhD thesis, Victoria University, Melbourne.
- Stabell, C. B. & Fjeldstad, O. D. (1998). Configuring Value for Competitive Advantage: On Chains, Shops, and Networks. *Strategic Management Journal*, 19(5), 413–437.
- Vargo, S. L. & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10.
- Vargo, S. L. & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1–17.
- Waite, G. (2003): Social Impacts of the Sydney Olympics. *Annals of Tourism Research*, 30(1), 194–215.
- Williams, J. & Aitken, R. (2011): The service-dominant logic of marketing and marketing ethics. *Journal of business ethics*, 102, 439-454.

TABLES AND FIGURES

Table 1: Scale of Fredline, Jago & Deery 2003, p. 30

1a. Because of the event noise levels in and around the Grand Prix have	<input type="checkbox"/> Decreased →	1b. How has this affected your personal quality of life?	-3	-2	-1	0	1	2	3
	<input type="checkbox"/> Increased →								
	<input type="checkbox"/> No change ↓ go to 2a.								
	<input type="checkbox"/> Don't know ↓ go to 2a.								
		1c. How has this affected the community as a whole?	-3	-2	-1	0	1	2	3

Table 2: Event related spending in the host region

Expenditures in the host region	in Euro
Visitors' expenditures	1,348,796.20
Expenditures within festival area (e.g. food, beverages, merchandising)	123,301.77
Expenditures outside festival area (e.g. shopping, restaurants, sightseeing, lodging etc.)	1,225,494.43
Event organizer's expenditures (e.g. rental fee, catering, logistics)	215,093.11
Total	1,563,889.31

Table 3: Economic impacts for the host region

Impacts generated from event related spending in the host region				
	direct impact	indirect impact	induced impact	total
sales impacts	810,627 €	448,191 €	446,937 €	1,705,755 €
income impacts	612,834 €	338,833 €	337,884 €	1,289,551 €

Table 4: Statements measuring the support of the festival by the host community

	M/ SD
I think it is good, that the Melt! Festival is held in this area.	4.72/ .58
I am going to visit the Melt! Festival next year.	1.72/ 1.32
I usually leave the area during the Melt! Festival (e.g. holidays, day trip).	1.05/ .28
I can imagine supporting the Melt! Festival as a volunteer.	1.84/ 1.49

Notes: *The statements were rated using a 5-point rating scale ranging from 1 'strongly disagree' to 5 'strongly agree'

Table 5: Social impacts of the festival for the host community

	occurrence of impact (Part A)			effect on personal quality of life (Part B) (M/ SD)
	agree	disagree	don't know	
Social benefits				
entertainment opportunities	93.3%	6.7%	0.0%	3.84/ .85
stimulation of economy and tourism	93.3%	6.7%	0.0%	3.57/ .84
opportunity to meet new people	90.0%	8.3%	1.7%	3.83/ .94
community pride	76.7%	15.0%	8.3%	4.04/ .87
reduction of prejudice against the host region	68.3%	18.3%	13.3%	3.71/ .93
cultural exchange between tourists and residents	48.3%	38.3%	13.3%	3.86/ .92
sense of togetherness within community	21.7%	68.3%	10.0%	4.31/ .75
visit of friends and relatives	13.3%	86.7%	0.0%	4.50/ .76
Social costs				
increased litter	51.7%	48.3%	0.0%	2.74/ 1.01
disruption of daily routines of residents	48.3%	50.0%	1.7%	2.62/ .77
increased noise levels	41.7%	56.7%	1.7%	2.64/ .71
environmental harm	31.7%	63.3%	5.0%	2.47/ .73
overcrowding	8.3%	91.7%	0.0%	2.60/ .55
increased prices for goods and services	6.7%	88.3%	5.0%	2.25/ 2.36
crime and vandalism	6.7%	93.3%	0.0%	2.00/ .58
overall impact of the festival				3.27/ .76

Notes: Impacts in Part B were measured using a five point rating scale ranging from 1 'very negative' to 5 'very positive'

Figure 1: Melt! Train

Source: <http://www.juliesbicycle.com/resources/case-studies/festivals/melt!>

Figure 2: Electric Hotel at Melt! Festival

