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Business models for sustainable growth in tourism
Co-creating tourism experiences: chances, frontiers and limitations
AIEST’s Advances in Tourism Research - Perspectives of Actors, Institutions and Systems

ABSTRACT BOOK

In alphabetical order according to the last name of the first author
### The Role of Gamified Technology in the Tourist Experience

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Game-related technologies have been discussed as a promising means for tourists’ co-creation of meaningful experiences. However, little is known about tourists’ motivations for engaging with gamified technologies. This study investigates tourists’ socio-psychological motivations for engaging with gamified technology during a pleasure vacation. The findings of this study contribute to the understanding of the motivational needs underlying tourists’ engagement with gamified technology and consequently, the role of gamified technology engagement in the tourist experience.

**Key words:** Gamified Technology, Usage Motivations, Engagement, Tourist Experience.

**Notes:**
Identifying Determinants of Sustainable Food Travel Product Choices – A Support Vector Machine Approach

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Considering the variety of factors that can influence sustainable consumption choices and their complex interaction, it is likely that sustainable consumption is a high-dimensional problem lacking a simple linear relationship to its various antecedents. Therefore, in this study, the support vector machine method is applied to classify consumers according to their choice behaviour of tourism products with specific sustainable food qualities. The results show that the developed support vector machine is able to correctly classify sustainable and less sustainable consumers in the great majority of cases. From the analysis of the importance of single features for predicting sustainable consumption behaviour, it can be concluded that characteristics of the last trip, certain attitudes towards ‘sustainable food on holidays’, and vegan orientation are most important for the choice of sustainable food travel products.

Key words: sustainable consumption, travel products, machine learning, support vector machines

Notes:
Does the Recreation Opportunity Spectrum (ROS) still apply?  
Evidence from Australia and Germany.

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According to the Recreation Opportunity Spectrum (ROS) different types of nature settings provide different recreational experiences. In contrast, other research suggests that humans benefit from nature experiences in rather similar ways, regardless of the specific environmental setting. To investigate which assumption applies, a study is conducted in urban parks and wildlands in Australia and Germany. In both places, identical surveys were used, measuring nature-concepts, perceived restorative capability of nature and travel motives. The results are compared to identify differences in the benefits visitors draw from visiting a park as a man-made environment vs. a national park as a wild area.

**Key words:** Nature characteristics, psychological processes, recreational benefits, guests’ choice, nature connectedness

Notes:
Reducing plate waste at hotel buffets

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In this presentation I will make a case for the problem of food waste in general, and the problem of plate waste in the hospitality sector in specific. I will then discuss in detail the (very few) prior empirical studies that have attempted to put measures in place to reduce plate waste. Finally, I will present our experiment in which we managed to successfully and significantly reduce plate waste in families.

Key words: food waste, experiments, sustainable tourism, hotel, buffet

Notes:
German wineries are in search for business models that can balance the three pillars of sustainability (economy, environment, society) and have developed different adaptation strategies/business models in order to answer to according challenges. The research deals with a strategy-sustainability-climate change nexus of German wineries with the goal of identifying the patterns of wine business development without the need to compromise any of the three pillars of sustainability. Sample size was 125 wineries from all German wine regions, and they provided insights into 30 variables related to sustainability, as well as the importance of strategy, sustainability, climate change and of viticulture style. The results demonstrate the correlation between winery strategy and a viticulture style, as well as between importance of sustainability and a long-term orientation of the strategy. A PCA Analysis has been conducted on the 30 sustainability indicators in order to create a business model typology for sustainability in the German wine industry, which resulted in the creation of 6 sustainability-based business models of the German wineries, with consequences for food, hospitality and tourism industry.

Key words: winery, strategy, sustainability, climate change, viticulture, business model, hospitality, food, industry

Notes:
The act of moving away from one's daily life shifts time and place to enable a temporary transformation of person to tourist. Studies of liminality typically associate behaviour in the tourist space with the breaking of social norms, and often intimate the emergence of suppressed deviant behaviour. Alternatively, flow theory focuses on positive behaviour, with potential to induce both physical and psychological gain. To better understand the tourist experience in liminal space, this study employs a longitudinal visual design to explore a continuum of behaviour in situ, and reveals moments of reflection, high engagement, and personal meaning.

**Key words:** Flow theory, liminality, tourist behaviour
The scientific value of econometric tourism demand studies: an evaluation

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The objective of this paper was to evaluate the scientific value of econometric tourism demand studies. Based on a questionnaire, we analyzed papers published in four leading tourism journals in the period 2007-2017. The evaluation of selected key questions showed that the scientific practice widely did not emphasize the difference between the substantive (economic) significance and statistical significance in a clear way, and used in many cases both terms as identical. In line of this flaws authors mostly avoided the discussion of the estimated outcomes in terms of size and reliability as well as dealing with the limits of their studies and the justification of the method chosen.

**Key words:** substantive significance, statistical significance, study limits, justification of methods.

Notes:
# Migrant ski instructor retention – a qualitative study

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The aim of this study is to understand what makes migrant ski instructors stay on the career and return to the employer after the summer season. 11 theme interviews were conducted among international ski instructors. The findings indicate a very strong influence of the work itself on retention as well as to practice the profession. The findings support the results of previous studies about the negative influence of seasonality and the positive influence of camaraderie on retention. Other important retention factors seem to be feedback and recognition.

**Key words:** employee retention, employee turnover, seasonal work, ski instructor

**Notes:**
This paper examines visitor management in the German-Swiss border area of the Lake Constance region. Taking a customer perspective, it determines the requirements for an application with the ability to optimize personal mobility. A quantitative study and a survey of focus groups were conducted to identify movement patterns of different types of visitors and their requirements concerning the development of a visitor management application. Visitors want an app that provides real-time forecasts of issues such as traffic, parking, and queues and, at the same time, enables them to create a personal activity schedule based on this information.

**Key words:** overtourism, (visitor) flow management, mobile application

**Notes:**
The Essential Problems of Local Tourism Governance in Japan using Pluralistic Approaches

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This paper considers the essential problem of regional tourism governance in Japan. In considering, we presented four hypotheses, examined each through literature research and verified it. The suggested guidance suggests that tasks will extend not only to institutions, but also to Japanese elements (such as thought) related to regional tourism governance.

**Key words:** local Tourism, governance, essential problems, Japan, pluralistic approaches

**Notes:**
Tourism beyond humans – robots, pets and teddy bears

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Tourism is universally considered as an activity specifically reserved for humans. Although not explicitly stated, all definitions of tourism assume that the tourists are human beings. However, the advances in animal ethics, artificial intelligence and experience economy in the last decades indicate that this fundamental assumption might need revision. Travel agencies already offer trips for teddy bears, hotels have special pet policies, companies sell stones as pets, while social robots will force companies to adapt to the new technological realities. This paper focuses on these non-human travellers in tourism (home robots, pets and toys) and the specific strategic, operational and marketing issues they raise for tourist companies.

Key words: robots, pets, toys, experience economy, non-human travellers.

Notes:
Disaster tourism’s challenges and opportunities

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Tourists have long been drawn to disaster sites, not just past disasters and ongoing recovery and reconstruction, but also disaster situations in progress. Many detrimental aspects of disaster tourism have been identified, including interfering with operations, placing people in danger, and disrespecting disaster-affected people. This paper advances disaster tourism knowledge by drawing on theoretical understandings from disaster research to propose how disaster tourism could be used constructively to help communities deal with potentially difficult and dangerous disaster-related situations.

Key words: disaster, disaster risk reduction, hazard, risk, vulnerability

Notes:
Do social and political factors affect the verification of tourism-led growth hypothesis?

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Although it has been investigated for almost two decades, the true nature of relationship between tourism and economic growth is still a subject of debate. Besides the methodological issues that have undoubtedly undermined the efforts to draw general conclusions, open question(s) could also be a result of ignoring a broader context in which tourism and growth interact. In this regard, the goal of this study is to examine the social and political factors affecting tourism-growth nexus. Specifically, the level of political freedom and the initial level of poverty are hypothesized to have a significant impact on the verification of tourism-led growth hypothesis.

Key words: Tourism-led growth; Political freedom; Social development; Dynamic panel analysis

Notes:
Reengineering of Local Destination Management Organizations in Slovakia

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The aim of the paper is to analyse the current organizational structure of destination management in Slovakia, which has been created based on the “bottom-up” approach and supported by state budget according to the Act no. 91/2010 C.c. The question is, if the parameters defined in the act for the financial support of the local DMOS contribute to the effective organization of local DMOs and if the existing activities of local DMOs and their state subsidies influence the tourism development in Slovakia. The set of quantitative research methods such as Chi-square Goodness of fit test at the significance level 0,05 and factor analysis are applied for analysis of contemporary situation and identification of the needs for reengineering process and novel of the Act no. 91/2010 C.c.

Key words: Destination management, Reengineering, Tourism policy, Slovakia

Notes:
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<th>Serious Gaming: an Innovative Method to Engage Stakeholders with Sustainable Tourism Planning</th>
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| **Lidija Lalicic, MODUL University Vienna**  
**Irem Önder, MODUL University Vienna**  
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This paper introduces the method of serious gaming to reveal the complexity of destination planning but also to engage all stakeholders to work towards a more participatory approach of sustainable tourism planning. Based on game play with four European urban destinations, varying according the degree of destination planning practices and challenges faced, interesting insights are generated. Not only is the method proven to be successful, contribution to theories in the field of sustainable destination management and stakeholder engagement are given.

**Key words:** serious gaming, tourism planning, stakeholders, urban destinations

**Notes:**
Let me fly

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What is disrupting the airline from flying? Are the new innovations? Are the drones grounding the aircrafts? Are the finances or the technical snags? The cost of fuel? The authorities or regulator are disallowing aircraft from flying?

An investigation to explore how this mode of transportation has become an essential medium for the tourism industry and the way everyone carries out one’s business in today’s environment.

How are the main stakeholders looking into this circumstance, ranging from the main actors being the pilots and crew up to the owners and passengers.

Key words: Asset utilisation, resources and results

Notes:
Issues of farmer's identity and efficiency of tourism-oriented diversification: revised from a perspective of behavioural economics

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Whether farm management in conducting tourism activity becomes more efficient or not is an important theoretical and empirical question for the promotion of tourism in agriculture. Thus, this study theoretically and empirically evaluated the efficiency of Educational Dairy Farms (EDFs) that provide educational tourism by data envelopment analysis (DEA). The financial data were collected by the author’s survey of these farms located around the Tokyo Metropolitan area. Based on the theoretical framework that stipulates that the efficiency of farm activity is determined by a farmer’s identity, a bilateral slacks-based measure (SBM) model was applied to empirically evaluate efficiency. The results revealed that those farmers that engage in processing milk products and direct selling have higher efficiency than those who do not. This is because having an enlarged identity that provides a wider perspective on farm activity enables these farmers to create demand and reduce marginal cost. This wider perspective was nurtured through the network of educational tourism activity. Thus, educational tourism activity by dairy farmers can nurture a new business opportunity and lead to efficient farm resource allocation.

Key words: educational tourism in agriculture, identity, DEA, slacks-based measure (SBM), efficiency, framing effect

Notes:
The importance of local business partners for tourism firms has been stressed out. But how do firms profit? A detailed understanding is still missing. This article outlines a research plan with the aim to open the ‘black box’ of inter-organizational value creation in local tourism networks. Based on the extended resource-based view, we propose tangible and intangible resource sharing as mechanisms that enable hotels to profit from local business contacts. Primary data from the Swiss hotel sector will be collected to test a corresponding conceptual model.

**Key words:** Local networks, resource-based view, resource sharing, hotel sector
Food has increasingly become an integral part of the tourism experience and a means for people to further explore the cultural values and characteristics of a particular place, country or region. Food related activities such as foraging, cooking, tasting and eating specific produce and ingredients are experiences that not only enable a greater understanding of food in general but also serve as a gateway to learn more about the history and culture of the place where the food is produced. Recently, an increased interest in ‘native’ culinary experiences has been noted, a prime example being related to Aboriginal culture in Western Australia, specifically native meats, herbs, fruits and spices. Aboriginal culinary experiences are in fact among the most unique cultural experiences on offer in Western Australia and include activities such as searching for ‘bush tucker’ or learning about traditional Aboriginal meals.

This paper specifically explores the connection between Aboriginal tourism, culinary tourism, and Asian visitation to Western Australia. It has been found that about 50% of all international visitors to Australia are from Asia, specifically China, which is the largest market for total visitor spending and largest inbound market for visitor arrivals. Although Asian visitors’ participation in Aboriginal tourism experiences is noticeably lower than for other international markets, some product elements do attract high interest from Asian markets, in particular native food experiences. Hence, in this paper we argue that this emerging niche sector has the potential to become a mechanism for local and regional development and to support indigenous communities, providing them with an opportunity for more economic and cultural self-determination.

**Key words:** Aboriginal tourism, culinary tourism, Asian visitation, Western Australia
| Barriers to stakeholder involvement in sustainable rural tourism development – experiences from southeast Europe |
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Participative planning approaches are vital to sustainable tourism development in rural areas. However, the literature shows that stakeholder involvement is often characterized by possible operational, structural, cultural and personal barriers. In the Danube region eight different case studies have been analyzed in order to understand barriers to stakeholder involvement. Our results show that the perception of sustainability and crucial criteria and indicators varies greatly, and that perceived deficiencies have a significant impact on the awareness. The study underlines that crucial indicators for sustainable tourism development need to be carefully introduced at beginning a participative planning approach.

**Key words:** rural tourism, stakeholder involvement, participative planning, rural areas in the Danube area, sustainable rural development

**Notes:**
Sustainability is currently one of the major priorities of tourism all over the world. Environmental practices and innovations of hotel business are a widely discussed topic in scientific literature nowadays due to the benefits they bring to organizations, notably increasing revenues and reducing costs. This paper deals with applying elements of green management in accommodation facilities in Czechia. It analyses the implementation of green management elements and the principles of sustainable development in accommodation services. It focuses on accommodation facilities and their use, and environmental measures.

Key words: Customer orientation, green management, hospitality management, revenue and yield management, service
Rural Destination Development and Knowledge-Based Diversification

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Three decades of fruitful interdisciplinary discourse, most prominently among the fields of strategy-, actors- and system theory, have propelled the theoretical conception of regional innovation systems. The analogous conception of tourist destinations as knowledge-creating systems but still shows substantial gaps, especially when it comes to destinations in export-oriented Emerging Economies. Enhancing the original knowledge-conversion logic of Nonaka & Takeuchi (1995) and backed by empirical findings from a rural destination of Azerbaijan, this article presents an integrative conceptual approach to the activation of interorganisational knowledge-potentials at the level of regional tourist networks.

Key words: knowledge-creation system, knowledge-conversion, rural tourist destination, emerging economies, regional economic diversification, innovation

Notes:
Entrepreneurship as a catalyst for sustainability-oriented business models in tourism

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For years the tourism sector enjoys unbroken growth with its positive and negative impacts making the demand for a change towards sustainable consumption and production (SCP) patterns evident. However, to act as catalysts, scientific clarifications are needed, which enhance the understanding of how especially touristic entrepreneurs can live up to this idea. Therefore, this study provides a theoretical review of what catalyst-induced change is, enriched by the respective concept from natural sciences. Five case studies approach present companies that have successfully established SCP patterns.

Key words: Entrepreneurship; tourism; SCP; catalyst

Notes:
The temporal variation of travellers’ flow is one of the main challenges of tourism stakeholders. Most of the destinations, especially coastal and mountain areas have to face some degree of the temporal concentration of arrivals or guest nights which is often accompanied by strong spatial imbalance, at the same time. The research focuses on one of the most popular tourism destinations in Hungary, namely the Lake Balaton.

Besides the increasing importance of non-conventional tourism mobility, guest nights at commercial accommodation is still one of the most important indicators for tourism stakeholders, therefore this data has been selected for the purpose of this study. Based on the available data on guest nights at commercial accommodation establishments, the research provides a detailed overview of the destination’s seasonality. With the help of Gin the Gini index, the analysis focuses on the composition of the temporal concentration and its development during the period 2003 to 2017.

The results of the analysis highlight different patterns of segments, and identifies ‘good potential’ target groups that can support mitigating temporal concentration. External factors, like the global financial and economic crisis has also influenced seasonal variation of tourism mobility to the Lake Balaton, the cancellation of second and third trips – mainly outside of the summer season – resulted a higher Gini index in these years. Another important conclusion is that although tourism development and marketing efforts has contributed to mitigating seasonality, as a ‘side effect’ there is an increased demand during the summer season, at the same time that leads to sustainability problems.

The implications of the research inspires further debate and inspire stakeholders how to manage the negative effects of tourism mobility’s temporal concentration.

**Key words:** seasonality, temporal concentration, Gini index, lake tourism, tourism development

Notes:
## Why should Robotics develop in tourism and leisure? Test Phase.

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Tourists are more and more numerous to travel, but they are also always more demanding, and we must constantly rethink the "journey-traveler": emotion, shared experience, interest in eco-tourism, lifestyle and meeting with locals. With the current and future technological changes, tourism is facing the new challenges of the digital transition: info-mobility, social networks, augmented reality, accelerated customization of services, robotics of service, smart destinations,... Companies and tourist destinations, Project leaders and start-ups must absolutely adapt to this new situation.

Robotics are not fiction science. The development of robots is part of a vast movement of "technology" products and services, in which tourism is already a field of application.

**Key words**: Robot, Robotics, technologization, AFEST, numeric consumers

### Notes: