



# THRIC 2024

Dingle, Co. Kerry

## Abstracts

Room 3:

*Technology*

Morning Session

**Title:** Embedding AR/VR in the Hospitality Classroom: The Educators' Perspective

**Authors:** Davin Dunlea, Jennifer Hussey, Ralf Burbach, Daniel King, Colin O'Connor, Belén Bemejo, Carlos Garcíá Juiz, David Fernando Cortés Gómez, Mia Blanc, Praneschen Govender, Elisa Laatikainen, Jouko Loijas, Teemu Moilanen, Jeroen Oskam, Alexander Schmidt, Pasi Tuominen

**Keywords:** Technology-enhanced learning Immersive technology Hospitality education.

**Abstract:** Abstract Hospitality educators today face a growing challenge of engaging students and developing new means of bringing the industry into their classrooms in a contextually relevant and timely manner. Four educational institutes received EU funding to explore the potential of using low-tech AR/VR tools in the hospitality classroom as a means of addressing these concerns. Currently, lecturers with limited time and resources, seek simple options that they can adopt without lengthy training and advanced technical support. Hence, this paper explores the practicalities of implementing certain AR/VR tools, with a view to adding to theory surrounding embedding technology in teaching practice. An exploratory study was conducted, with a sample of eight university lecturers on how the implementation of AR/VR tools in the hospitality classroom unfolded. Students were immersed into various immersive experience across a variety of hospitality scenarios such as a complaining guest. Data was collected via participant journals. Thematic analysis was used to analyse the data. This paper presents findings from lecturers in higher education who adopted the AR/VR prototypes. The participants identify the substantial benefits offered by adding these tools to the hospitality lecturer's toolkit. Benefits included increased engagement from learners, particularly emotional responses resulting from the immersive experience and increased class engagement. Various obstacles reported included: connectivity issues, time required to set up the experience and issues around glitches in the system when using in class. This paper provides insights into the usability, practicality, and flexibility of low-tech options. Implications from this research are that AR/VR can be applied in the classroom, however lecturers need sufficient support to develop it effectively. This paper contributes to the emerging literature on the use of this technology in the classroom.

**Title:** Robotics, Artificial Intelligence and Service Automation (RAISA) for sustainable hotel operations- Systematic Review of the Literature.

**Authors:** Neeta Israni, Atlantic Technological University, and James Hanrahan, Atlantic Technological University.

**Keywords:** Sustainability, RAISA (Robotics, Artificial Intelligence, Service Automation), Barriers, Enablers, Technology Adoption, Sustainable Operations, Systematic Literature Review (SLR), Thematic Analysis

**Abstract:** Sustainability is a pressing concern in the tourism and hospitality sector, and innovative technologies like Robotics, Artificial Intelligence, and Service Automation (RAISA) have the potential to enhance sustainable practices. Linking sustainability and RAISA can catalyse and improve the transition to net zero. RAISA is an enabler of the transformation needed for sustainable operation management. To explore the evolving technological landscape in hospitality, gain insights into the factors (barriers/enablers) that might influence the decision of hoteliers to adopt RAISA and collate the various grand theories explaining technology adoption, we conducted a Systematic Literature Review (SLR) by following Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) 2020 guidelines. Using Braun and Clarke's six-phase thematic analysis, we synthesised research published from January 2013 to August 2023, identifying five themes: Technology, Sustainability, Enablers, Barriers and Theories. Our SLR contributes to the extant literature base, advances our understanding of the links between sustainable operations and innovative technologies, identifies the gap, and provides a roadmap for future studies by highlighting the need for empirical research to connect RAISA with sustainable development goals.

**Title:** Smart accessibility and the role of technology in regenerative tourism

**Authors:** Mary-Anne Kearns, Noelle O'Connor, Anthony Johnston

**Keywords:** Regenerative, Technology, Accessible.

**Abstract:** The research paper delves into the realm of smart accessibility and the pivotal role of technology in fostering accessible regenerative tourism. As a society, we are increasingly cognizant of the intricate web that binds people and nature, a realisation propelled by factors such as the ongoing pandemic, climate change, ecosystem destruction, rising inequality, and economic changes. Regenerative tourism, a beacon of hope, strives to ensure that travel and tourism leave a positive imprint on people, places, and nature, thereby nurturing the long-term renewal and thriving of social and ecological systems (Dredge, 2022). The surge towards regenerative tourism intersects with accessibility initiatives, bolstering the industry's efforts to make destinations more accessible, inclusive, and sustainable. Accessible tourism is regenerative as it prioritises inclusivity for individuals with disabilities and contributes to the environment, local economies, and communities. There are several ways in which accessible tourism is regenerative. By creating accessible spaces and experiences, all visitors benefit. Community engagement fosters local pride and job opportunities. Emphasising sustainability rejuvenates destinations. Facilitating travel for individuals with disabilities promotes cultural exchange. Diversifying local economies by attracting a broader audience raises awareness about the needs and rights of people with disabilities. Revitalising areas by becoming tourist-friendly boosts local businesses and infrastructure. Accessible tourism is regenerative as it not only enhances the travel experience for individuals with disabilities but also promotes sustainable economic growth, environmental stewardship, and social inclusivity. By embracing accessibility, tourism can contribute positively to communities and their ecosystems (Darcy, Cameron and Pegg, 2010). The term 'smart' denotes utilising advanced technology and the interconnection of different technologies and artificial intelligence in resource optimisation. This concept has found application in areas such as smart tourism locations (Agapito and Guerreiro, 2023, p. 11). The escalating concerns about disability, accessibility, and universal environments in tourism have garnered global attention in academia and industry, particularly with the pivotal role of technology in accessible tourism (Lam, Chan, and Peters, 2020, p. 1). The former Secretary General of the United Nations World Tourism Organization (UNWTO), Taleb Rifai, has underscored the significance of technology and innovation in developing accessible tourism to address concerns about disability, accessibility, and universal environments (UNWTO, 2017, cited in Lam, Chan, and Peters, 2020, p. 1). Smart accessibility and technology are indispensable in enhancing accessible experiences in regenerative tourism, offering innovative solutions to cater to the needs of travellers with disabilities while promoting regenerative practices (Ercan, 2022). Integrating technology within hospitality and tourism offerings can broaden the reach of experiences, enabling patrons with

disabilities to access them. For example, individuals with visual impairments often face challenges accessing tourism and hospitality, but mobile technology and applications can reduce these constraints (Lam, Chan, and Peters, 2020, p. 1). Technology can also be vital for individuals with disabilities to participate in the hospitality and tourism industries (Tlili et al., 2021, p. 2). Although there may be an apparent inconsistency between adopting technology in sustainable tourism and the idea of disconnecting from daily life, the research emphasises the role of intelligent technologies in solving contemporary issues in tourist destinations (Coca-Stefaniak 2020, cited in Agapito and Guerreiro, 2023, p. 2). Organisations in the hospitality and tourism industry increasingly recognise the potential benefits of integrating technology to make their services accessible to a broader range of people (Hemmington, 2007; Stankov and Gretzel, 2020, cited in Tlili et al., 2021, p. 2). However, there is still a noticeable dearth of research on the impact of technology-empowered accessible hospitality and tourism services (Lancioni et al., 2020; Lim, 2020, cited in Tlili et al., 2021, p. 2). There is a pressing need for the tourism sector to delve deeper into research methods to safeguard nature and promote an accessible and regenerative approach to tourism (World Travel & Tourism Council, 2022). This call for further research invites active participation and engagement from all stakeholders in the tourism industry. Potential methodologies include data collection through surveys, interviews, and focus groups to gather insights on barriers faced by tourists with disabilities or mobility challenges. Realtime data analytics could be used to assess the effectiveness of accessibility features and monitor visitor satisfaction. Needs assessment with stakeholder engagement would involve collaborating with local communities, tourism authorities, and accessibility advocates to identify the specific needs of diverse tourist populations. Feedback loops could potentially be established with visitors who use accessibility features to refine and enhance services.

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**Title:** Supporting future tourism development: A multi-perspective research overview from the Algarve, Portugal.

**Author:** Neil Ormerod, Ana Rita Cruz, and Sandra Godinho

**Keywords:** Digitalisation; Tourism futures; Coastal Tourism

**Abstract:** Since the 1960s, the Algarve region of Portugal has evolved into a well-established mass tourism destination, attracting visitors from key European markets such as the United Kingdom, Germany, France, Spain, and the Netherlands. Unsurprisingly, tourism plays a central role in the regional economy accounting for more than 60% of its economic output. However, this decades-long trajectory of mass tourism development has also resulted in a narrow tourism market largely focused on a single product, namely beach-based leisure. This is despite attempts by local authorities to diversify their tourism offerings through investment in initiatives such as annual event tourism programmes and inland nature-based tourism activities. In contrast to the stasis of the Algarve tourism product, the tourism sector has been subjected to rapid recent change and uncertainty from contemporary global crises, including amongst others, climate change, COVID-19 and Brexit. As a result of these seismic shifts in the tourism sector landscape, important questions have been raised by stakeholders about how tourism-related sectors of the economy can sustainably develop resilience, enhance innovation, and realise longterm economic aspirations (Lekgau and Tichaawa, 2021). In response, new research approaches grounded in sustainable and regenerative tourism principles are being co-developed with tourism stakeholders to address current and future challenges. In this paper we provide an overview of two evolving innovative research initiatives, namely the DIBEST (Digital Innovation for Blue Enterprises & Social Tourism) and The FuturETHinking project. The EU funded Interreg Atlantic Area DIBEST project focuses on how digitalisation can leverage the blue economy to foster sustainable growth and innovation in the region's tourism sector. Embracing digital technologies can enhance the visitor experience while minimising environmental impact. Furthermore, digitalisation offers tools for better management and monitoring of marine resources, aiding in the preservation of the Algarve's coastal ecosystems (Balogun et al., 2020). As part of the DIBEST project, Algarve micro-tourism businesses and other stakeholders have already contributed to focus group discussions informing the development of a survey instrument to examine the digitalisation needs and challenges of micro-tourism enterprises across the DIBEST project area. As the project progresses, their involvement will involve participating in the trial and evaluation of training to support digital business transformations. Turning to the FuturETHinking project, this research focuses on how event-tourism organisations navigate emotional barriers to future thinking with the purpose of identifying and testing techniques which support future planning. This work diverges from previous future-planning studies which have predominantly focused on operational aspects. Instead, our data comes from small-group discussion (polylogues) of four provocative future scenarios set in 2050

(Ormerod et al., 2024). Our findings from a large-scale pilot study involving 120 event, tourism and hospitality professionals reveal that initial pessimism and fear of the unknown closes down productive thinking about the future, but that group conversation can mediate this effect. The approach is now being explored within the Portuguese context through collaboration with Albufeira municipal council to examine the future of their eventtourism portfolio strategy.

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