Smart tourism and competitive advantage for stakeholders

Smart tourism has generated a new paradigm in the tourism industry, propelled by the revolution of information and communication technologies (ICT) (Buhalis and Amaranggana, 2014). This has been enabled by tourism organisations and destinations operating as an ecosystem (Boes et al., 2016). A range of technologies, such as smartphones, sensors and beacons, as well as software and applications, virtual reality, augmented reality, artificial intelligence, big data, internet of everything (IoT), cloud computing, autonomous vehicles and drones, have been used to support interoperability and interconnectivity (Buhalis and Leung, 2018). Smart tourism encompasses networked ICT, providing opportunities for both tourism consumers and organisations (Li et al., 2017). Wang et al. (2013) suggests that smart tourism destinations consist of three main components, namely, cloud services, IoT and enduser internet service system.

The concept converges a range of areas, including organisational structures, processes, governance and management. Smart tourism has been extensively explored and exploited, primarily in the context of smart destinations (Boes et al., 2015), where large volumes of traffic requires coordination and collaboration between multiple players. A destination's competitive advantage increasingly emerges through its relationship with smart tourists, innovative and interconnected organisations and destination resources facilitated by networked organisations (Koo et al., 2016). Smart tourism destinations emerge as knowledge-based destinations, where ICTs, IoT, cloud computing and end-user internet service systems (Buhalis and Amaranggana, 2014) are used to provide instruments, platforms and systems to make knowledge and information accessible to all the stakeholders in a systematic and efficient way and to make available mechanisms that allow them to participate as much as possible in the innovation process (Del Chiappa and Baggio, 2015). The concept of competitive advantage in a destination reflects the ability to provide both higher-quality travel experiences and value for travellers, as well as quality of life for residents. Smart tourism supports travellers to get involved in both authentic travel experiences and co-creation of their customised experiences (Huang et al., 2017). The importance of smart tourism competitiveness effectively means that smart travellers and residents converge into a shared life where travel becomes a layer of the physical world (Koo et al., 2017). Similarly, for technology adoption, leadership is critical for the development of the smart tourism ecosystemat both the macro and micro levels (Spencer et al., 2012). Smart tourism provides practical insights for all stakeholders engaged in the co-creation of value, including tourism consumers; local residents; city, provincial and national governments; city, regional and tourism planning authorities; destination management organisations (DMOs); tourism intermediaries, such as travel agencies and tour operators; hospitality, leisure and cultural heritage organisations; general businesses and institutions; and academia. By engaging all stakeholders in a conversation about their interests and responsibilities, smart tourism provides a dialogue as well as platform to facilitate value co-creation (Boes et al., 2016; Mistilis et al., 2014).
2014).

Smart tourism increases residents' and destinations' shared vision and sustains the smart destinations' competitive advantage (Femenia-Serra et al., 2018). All stakeholders, such as

general business, tourism companies, ICT companies, governments and residents, as well as individual travellers, become closely involved to co-create value for each other (Koo et al., 2017). Smart tourism therefore can be developed as a new approach to create a new boundary of tourism production and co-creation of value. By enlarging the convergence of the interests of governments, businesses, residents and visitors together, smart tourism can strengthen the competitiveness of destinations (Boes et al., 2016).

Previous studies on smart tourism and competitive advantage demonstrated that tourism lacks a shared vision across the interests of various stakeholders. Yet, there is a great academic as well as practical desire to conceptualise smart tourism and competitive advantage at a holistic level and to improve the performance of the entire ecosystem (Boes et al., 2016). The focus on the destination side of smart tourism developments should be extended to countries, cities, organisations and individual organisations currently implementing smart tourism (Gretzel et al., 2015). Residents and tourists should also be central to the debate as the primary recipients of value through the process. The organisational convergence of smart destination and co-creation of value ecosystemtowards competitive advantage is much more critical and important than simply the technical improvement (Neuhofer et al., 2012).

Tourism Review presents this special issue that comprises eight articles, focussing on "Smart Tourism and Competitive Advantage for Stakeholders", providing theoretical and practical implications for the tourism industry and academia. The special issue attempts to discuss and identify new trends and developments about smart tourism. It examines how smartness empowers competitive advantages for hospitality and tourism industries, with an emphasis on implications for sustainability, destinations, businesses, residents and travellers. The articles reflect the importance of this research topic and cover a variety of topics representing a global approach.

The first paper, "Tourism information technology research trends: 1990-2016", by Yulan Yuan, Tseng Yuen-Hsien and Chaang-Iuan Ho, reviews tourism ICT papers published in selected journals from 1990 to 2016 and the general trends of tourism ICT research. The second paper, "Tourists' shifting perceptions of UNESCO heritage sites: lessons from Jeju Island-South Korea", by Kun Kim, Ounjoung Park, Jacob Barr and Haejung Yun, analyses the shifting perceptions of international tourists to Jeju Island and provides practical lessons for the tourism industry. The third paper, "Gamified mobile experiences: Smart technologies for tourism destinations", written by Ander Garcia, Maria Teresa Linaza, Aitor Gutierrez and Endika Garcia, explores the implementation and validation of gamified mobile experiences as a smart technology for DMOs to promote their destinations during the on-site phase of the travel experience. The fourth paper, "Smart hospitality: Taiwan hotel stakeholder perspectives", written by Rosanna Leung, attempts to explore this under-investigated area and identifies opportunities to use smart tourism methods in hospitality. The fifth paper, "Smart destinations and tech-savvy millennial tourists: Hype versus reality", by Francisco Femenia-Serra, Jose Perles-Ribes and Josep Ivars-Baidal, illustrates the reality of emergent tech-savvy tourism demand. It examines the response of this segment to critical dimensions of technology use in the context of smart destinations. The sixth paper, "Mobile technologies and applications towards smart tourism: State of the art", by Jelena Dorcic, Jelena Komsic and Suzana Markovic, provides a systematic literature review of academic research related to mobile technologies and applications in smart tourism. The seventh paper, "Data-focused managerial challenges within the hotel sector", written by Markus Lamest and Mairead Brady, explores managerial decision-making challenges of data usage as online and offline customer data flood firms and new techniques emerge to manage data through interactive dashboards. The eighth paper, "The emerging smart event experience: An interpretative phenomenological analysis", by John Bustard, Peter Bolan, Adrian Devine and

Karise Hutchinson, provides the first event experience model in a smart tourism context. It presents the interlocking elements of digital event experience through the four Ps (people, processes, personalisation and places) and the seven Rs (rituals, realms, realities, renewal, review, relational and resourcing).

Tourism Review is the oldest and most established academic journal in our field that is engaged with trends related to tourism and hospitality. Tourism Review has always provided cutting-edge topics and analysis in tourism. The papers in this special issue cover different topics of smart tourism in hospitality and tourism in the literature. They provide a comprehensive theoretical overview of the topics as well as practical implications for tourism administration. Most critically and importantly, this issue offers significant insights for tourism academic and industry fields, and we trust that readers will find this special issue informative and meaningful.

In memory of Oriol Miralbell Izard
This special issue is dedicated to the memory of our friend and collaborator Oriol Miralbell Izard, the fourth member of the team who, unfortunately, did not survive the battle with cancer to see this special issue published. Oriol, a dedicated eTourism researcher, teacher and practitioner, had invited us to CETT in Barcelona in 2016 to discuss smart tourism, and the idea of a special issue emerged over a wonderful dinner. He was a pioneer of eTourism, having hosted the ENTER conference in 2000 on behalf of Barcelona tourism office. He was a dedicated visionary and a passionate researcher and educator. We miss his intellectual engagement, his multidisciplinary and multicultural approach, his Catalan impulsive character and his wonderful friendship, and we dedicate this special issue to his memory.

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