Part III: Smart Cities and Smart Tourism Destinations

8 Smart city or smart tourism destination?
The formation of smart Ljubljana in Slovenia

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Introduction

A city comes to be known as 'smart' through the deployment of smart initiatives (Komninos et al., 2019). Smart initiatives contribute to the management of urban challenges and are present in varying forms, namely social media platforms, wireless internet, mobile applications, booking platforms, information beacons and so on (Femenia-Serra et al., 2018; Roopchund, 2020). The efficiency of these solutions is made possible through optimisation techniques that increasingly employ machine learning, deep learning and artificial intelligence algorithms (Buhalis et al., 2019; Fox, 2017; Estrada et al., 2019). In some places, smart initiatives have been designed specifically in response to tourism management needs and for enhancing visitor experiences, thus extending the nomenclature to 'smart tourism destinations' (Cavalheiro et al., 2020). Importantly, both smart cities and smart destinations emphasise the core principle of interoperable systems that connect and generate value for stakeholders (Buhalis, 2020). Smart cities are also capitalising on sharing economy (Taheri et al., 2022; Buhalis et al., 2020).

Little is known of the processes that drive smart initiatives (Mehraliyev et al., 2020). While some have shed light on the core resources and conditions necessary for achieving smartness (Lee et al., 2014; Boes et al., 2016; Shafiee et al., 2019), fewer have elaborated the stages of smart development through which these resources and conditions are organised towards their practical design and implementation. For example, working in the context of smart cities in Korea, Lee et al. (2013) developed a three-stage development model: preliminary activity, developing actions and follow-up stage of implementation. In the case of smart tourism destinations in China, Zhu et al. (2014) provided two stages of smart development – designing and operating – which involve government and organisations such as technology and tourism enterprises. However, Gretzel et al. (2015) suggest that smart tourism should be conceived as an ecosystem in which various technological components and entities exist with diverse roles and identities. The experience value co-creation process on destination online platforms in the pre-travel stage significantly affects the destination emotional experience (Zhang et al., 2018).

This chapter moves this conversation further by focusing on the role of collaboration in bringing together these diverse stakeholders and roles. Stakeholder collaboration is essential to smart cities. Janssen et al. (2019) argue that lack of stakeholder collaboration can inhibit interoperability and robustness, thereby hindering smart city developments. Indeed, the optimisation of smart networks are far from 'neutral', 'politically benign and commonsensical' (Kitchin, 2014: 8). Instead, they rely on multiple, diverse stakeholders who construct and dictate the efficiency of operations (see also Baggio et al., 2020). Yet, as Zuzul (2019) observes, the smart city collaboration process is still not clearly understood and, as a result, necessitates further insights from varying contexts.

Collaboration is central to tourism destination management and has historically been integrated into destination process frameworks (Zhang et al., 2018). Gray (1985) formulated a destination management model with three stages: problem-setting, direction-setting, and structuring. Selin and Chavez (1995) built on Gray's model to emphasise partnership, thereby adding the stages of structuring and outcomes. While several other studies examine the development of collaborations (Waddock, 1989; Caffyn, 2000), it is Wang and Fesenmaier (2007) who present the most detailed framework for examining the formation of destination collaboration. Collaborative frameworks are linear and focused on internal processes. Bramwell and Cox (2009) suggest applying path dependence theory to incorporate the historical contexts that can influence collaborative stages. Considering the importance of the interoperability of diverse stakeholders and technological components (Buhalis

et al., 2019), there is a need to understand better the social, political, and technical processes that drive 'smartness' (see Zuzul, 2019).

This chapter investigates the processes by which Europe's Capital of Smart Tourism (2019 and 2020) – Ljubljana, Slovenia – has developed and instituted its smart initiatives. By doing so, the chapter bridges the academic literature on smart cities and smart tourism and extends our understanding of the social, political, and technological processes that drive 'smartness' at the destination level. Using Ljubljana as a case study, this chapter employs Wang and Fesenmaier's (2007) destination collaboration process framework alongside path dependence theory to trace the city's development of smart tourism initiatives. While the technological aspects of smart cities and smart tourism destinations have received considerable attention in the literature (Mora et al., 2019; Bastidas-Manzano et al., 2020), focussing on the human dimension and collaboration specifically enriches our understanding across both smart cities and smart tourism literature.

Literature review

Understanding smart cities and smart tourism destinations

The concept of smart cities remains debated and somewhat abstract within both practice and academic literature (Kumar, 2017; Bibri, 2019). Within academic research, smart cities are conceptualised as being "*related to solutions that optimise urban systems and user behaviour through smart devices, ICT-based automation, sensors and instrumentation*" (Komninos, 2014: 20–21). Governing bodies such as the European Union note that a smart city is "*a place where traditional networks and services are made more efficient with the use of digital and telecommunication technologies for the benefit of its inhabitants and business*" (EU, 2020: n.p.). In light of the varying definitions, Bibri (2019) proposes a contextual conceptualisation. The varied meanings of smart cities have resulted in diverse representations and understandings of how these places should develop (Zuzul, 2019).

Some authors have formulated smart city development models based on a stage model approach (Lee et al., 2013; Siokas et al., 2021). Kumar et al. provide a smart city transformation framework in which a city is said to undergo four stages: planning phase, creation of physical infrastructure, formation of information and communication technologies (ICT) infrastructure and deployment of smart solutions. Noori et al. (2020) create a three-stage model: input resources, throughputs, and outputs; however, the type of stakeholder engagement is unclear. The city government drives most smart city developments in Europe to provide a better standard of living for local citizens (Perboli & Rosano, 2020).