

7 Co-creating and co-destructing personalised experiences through smart tourism

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Introduction

The 4th industrial revolution has pushed the development of smart tourism cities' infrastructure and transformed business processes for value co-creation. The concept of a 'smart city' signifies capabilities for tourism resource optimisation and value co-maximisation through smart technology (Buhalis, 2020). Tourism destinations have long used technology to develop their competitiveness (Buhalis & Wagner, 2013). The rapid development of smart cities opens new space for advancing tourist experience (Buhalis & Amarrangana, 2015). However, the capabilities of smart cities to inform tourism infrastructure and secure value maximisation remain largely underexplored (Matos et al., 2019; Gretzel, 2018). Being dependent on collaboration between tourism businesses and other stakeholders, the process of value co-creation through smart technology can also result in value co-destruction (Vargo & Lusch, 2017). Understanding value co-creation and co-destruction processes in smart tourism cities is crucial for businesses (Pillmayer et al., 2021; Assiouras et al., 2019).

Historically, businesses used market research results and their expertise to interpret tourist requirements and adapt service offerings accordingly in the mid and long term. Personalisation has long been acknowledged among the essential tools to co-create advanced tourist experiences (Ricci et al., 2015). Personalisation refers to a strategy of creating a service with the parameters that are relevant to satisfy the individual needs and demands of a customer (Volchek et al., 2021). The capabilities of tourism service providers to identify real-time tourists' preferences and constraints and distribute

services create the potential for delivering relevant, novel and memorable travel experiences. In contrast, irrelevant services offerings are likely to result in customer dissatisfaction. The importance of personalisation, together with a risk of co-destructed experience by an irrelevant service, urges the need for a reliable personalisation strategy to ensure the relevance of a service offering. As a facet of smart tourism cities (Choi et al., 2019), personalisation depends on big data and their infrastructure (Stylos et al., 2021). Accurate recognition of tourists' needs requires tourism service providers to utilise real-time data and a range of analytical techniques (Buhalis & Sinarta, 2019).

Smart tourism cities' infrastructure offers opportunities for reengineering processes and automating many aspects of value co-creation. The growing scope and quality of available relevant data, the increasing interconnectivity of smart technologies, and the advancements in data analytics provide new ways to observe real-time human behaviour and interpret immediate tourist needs (Wise & Heidari, 2019; Stylos et al., 2021). However, a generalised view on utilising smart city infrastructure to advance travel experience through personalisation rather than destroying it, is still missing.

This chapter conceptualises the potential of a smart tourism city to co-create and co-destruct tourist experiences through personalisation. The chapter uses a multidisciplinary approach to integrate tourist behaviour, information system design and service management. The chapter first defines personalisation as a service offering in tourism and explains the reason why it is acknowledged as one of the determinants of advanced tourist experience. The chapter then defines the types of resources required for personalisation. It then applies the concept of layered system architecture to match the resource requirements of successful personalisation with the capabilities of smart city infrastructure. The chapter applies Service-Dominant Logic (SDL) (Vargo & Lusch, 2017) to conceptualise the potential of not only co-creating but also co-destructing tourist experiences through the process of personalisation. It proposes a new resource-based framework that explains the processual view of tourist personalised experience creation by smart tourism cities infrastructure. The proposed framework argues that the relevance of resources, which are contributed by a smart tourism city's stakeholder, determines whether travel experiences are co-created or co-destructed through personalisation. The chapter suggests that adequate coordination between all smart tourism city stakeholders is crucial to realise the capabilities of personalisation to deliver advanced tourist experiences.

Personalised travel experiences

Service personalisation is a strategy of creating a service offering with features that are suitable for satisfying individual customer's needs (Volchek et al., 2019). Market interactions are motivated by attempts to create value (Akaka et al., 2017). Value for customers is associated with the satisfaction of their personal needs. According to the Porter's focus differentiation strategy (1998), the better the match between personal needs and service offering's characteristics, the higher customer value can be created. Individually designed, personalised and individualised services have a greater potential to maximise customer value, than standardised solutions.

Personalisation in tourism is recognised among the future determinants of travel business competitiveness (Zanker et al., 2019). A distinctive feature of tourist needs is their high dependence on real-time context and situations whilst travelling (Buhalis & Sinarta, 2019). An unexpected crisis situation (both personal or contextual); proximity to an unseen attraction; unexpectedly available time (due to a cancelled meeting, for example); an encounter with new acquaintances; previously unconsidered events, and many more contextual factors can motivate or force tourists to change earlier-defined plans and form new demands on the go. Equally, health situations for travellers or dependants; unexpectedly long distance from the point of interest due to traffic; worsening weather; congestion conditions; Internet connection and network challenges; low battery life, can prevent tourists from realising their individual plans and force last-minute itinerary changes. Increasingly, travellers benefit from highly-relevant service that is responsive to contextual challenges and opportunities in real time. Offerings need to be sufficiently flexible to satisfy their immediate needs and support value co-creation when so many external conditions may disrupt travel plans (Buhalis & Foerste, 2015). This became obvious during the COVID period or when wars or terrorism attacks occurred at destinations or in transit regions.

The main challenge that arises for travel businesses is to react in real-time to the changes in individuals' situations. To keep the service offering relevant, personalisation commonly applies known behaviour traits and formed preferences to offer a relevant service. In addition to pleasure, tourist behaviour is driven by the need for novel, authentic, and memorable experiences (Skavronskaya et al., 2020). Therefore, tourists can switch to a non-typical behaviour, referred to as liminal, for the duration of their trips. This means that tourists can try services that they do not encounter in their daily routines, such as unfamiliar types of accommodation, new types of travel attractions, unusual activities, entertainment and food (Pung et al., 2020). Given the high dependence of tourist needs on a real-time situation, the