Chapter 18

Gamification as a Tool for Smart Tourism

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ABSTRACT

New technologies have helped to improve the tourism sector and to develop strategies that resulted in the so-called smart destinations, underpinned and transformed by modern information and communication technologies (ICTs). Besides, tourism is a global market that continuously seeks mechanisms to grab tourists’ and visitors’ attention. In view of that, in recent decades, the gamification concept has acquired new definitions from different perspectives, but always associated with the idea of leisure. In tourism, gamification is related with experiences, which by using game elements and digital game design techniques (virtual reality or augmented reality, among others) improve the tourist experience and the user’s engagement. This chapter addresses gamification and its influence on tourism experience, together with some gamification applications’ examples that can be effective mechanisms to promote tourism businesses or tourism destinations, raising engagement and generating trust.

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INTRODUCTION

The word “smart” is a marketing tag used for everything that has technology incorporated or has been made better by technology (Boes, Buhalis, & Inversini, 2015). This new concept started by an exploring phase of content definition (Buhalis & Amaranggana, 2015; Gretzel, Sigala, Xiang, & Koo, 2015) and supporting technologies identification (Atembe & Abdalla, 2015; Chung, Tyan, & Han, 2017) entering now a new phase of applications’ development and evaluation (Buhalis & Leung, 2018; del Vecchio, Mele, Ndou, & Secundo, 2018).

Thus, the expression smart tourism can be tracked back to the association of tourism with information and communication technologies (ICTs). Smart tourism is a modish concept focused on the growing dependence of tourism destinations’ industries and tourists on the ICT emerging forms, allowing the conversion of big data into value propositions (Gretzel et al., 2015). This information exchange system encompasses several approaches such as electronic commerce, virtual reality (VR) and augmented reality (AR) that can affect destination image formation (Hunter, Chung, & Gretzel, 2015).

When looking into electronic commerce, online purchases of airline tickets, accommodation, car rental service and other tourist services can be made (Kim, Lee, & Chung, 2013). As for virtual reality, the user has the possibility of navigating the computer through simulated environments (Hunter, 2014) which represents an experience that will influence the potential tourist’s perceptions (Hunter et al., 2015). The relation between tourism and ICTs is well known, especially when talking about augmented reality, which allows commercial and historical data to be projected through a computer (Hunter, 2014).

Related to smart tourism, new concepts as smart tourist and smart destinations arise, being the smart tourist the one who uses smart technologies and visits smart destinations (Femenia-Serra & Ivars-Baidal, 2018). To conduct a research study in this field, it is important to know which current and/or future techniques are in use, not only scholarly, but in the real market and services. According to Werthner, Alzuza-Sorzabal, Cantoni, Dickinger, Gretzel, Jannach and Stangl (2015) among these innovative technological smart solutions are mobile applications that run on many different devices and not just on one: all possible due to the Internet, with permanent connectivity, new paradigms of human-computer interaction (e.g. the last search or recommendation, with emotional, implicit, sensor-based, proactive approaches), multilevel data analysis, collective intelligence, and applications based on advanced machine learning techniques or games.

All these technological advances have been receiving growing interest in the last decade, particularly in non-game contexts (Deterding, Dixon, Khaleel, & Nacke, 2011) such as tourism, fabricating a recent phenomenon called gamification. That is to say that gamification, created to be used in technological contexts, has crossed its own scope and has begun to be cross-applied, as in the case of tourism. Its usefulness in tourism is such that gamification has been used as a tourist attraction.

Gamification techniques are intended to engage users and influence their behaviour through game design elements in areas other than the traditional game context (Zichermann & Cunningham, 2011).

Moreover, nowadays, gamification is also used in the creation of learning environments. Among the most current approaches are the modern methods of behaviour, therapy for fragmentary gamification of the activity (Hall, 2004), technologies using gamification in philosophy or people awareness from different ages (Retyunskikh, 2003), play methods of customer scrutiny (Popov, 2006), the “Y” generation problem of training and recruitment (Nemkov, 2013), huge attraction for games in business processes (Zickermann & Lynder, 2014), game thoughts in marketing, innovation and staff motivation, learning
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