


Chapter 6

Blockchain Technology in Tourism Management: Potentialities, Challenges, and Implications

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ABSTRACT

The tourist activity realized early on the advantages in the adoption of technology for the performance of its activities. With the emergence of the technological environment provided by Industry 4.0, blockchain technology emerges as the most disruptive and consequently more challenging technology for the tourism industry, since it has excellent potential to leverage innovation in this activity, whether in terms of products, processes, management, marketing, or institutionally. A bibliometric analysis was carried out to investigate affected studies in the tourism area, including the hotel, restaurant, marketing, and other sectors. Application of blockchain technology may be the key to boost tourism since its applicability presents several opportunities for tourism stakeholders, adds security and confidence in business transactions, can influence changes in the tourism value system, in terms of the value creation for customers, value creation for business, and in the tourism distribution chain.

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INTRODUCTION

The practice of quality management in tourism, with employees with knowledge of the activity and quality in the provision of its service (Bontis, Janošević, & Dženopoljac, 2015), contribute to the definition of the marketing strategies and to the performance of the tourist organization, which can lead to success or failure of a company.

The critical factors of the success of the tourism industry in general, and in particular to hospitality, catering, transport and events, involves the provision of services and products that meet customer satisfaction, which must be provided with quality, properly disclosed through internet (websites and social media platforms), in order to contribute to the growth of the business, through the retention and loyalty of the customer and the raising of new customers.

In addition to loyalty, the relationship established with the customer can be measured by customer complaints, by the quality of the customer database, customer retention rate, satisfaction, customer service capacity, identification of customer needs, new strategic customers, customer sales value (Manzari, Kazemi, Nazemi, & Pooya, 2012), among others.

In this context, a new challenge has arisen since it is necessary to resort to information technologies, associated with the environment tourism 4.0, which guarantees the confidence and security of information communication through the Internet (Calvaresi, Leis, Dubovitskaya, Schegg, & Schumacher, 2019), with campaigns suited to the right customer and at the right time, wherever they are, with the aim of maintaining the reputation of tourist companies as well as the promotion of their products and services.

To overcome the challenge of security and the trust of sensitive information, associated with customers, the solution is to use blockchain technology, which will ensure (Baralla, Pinna, & Tonelli, 2019; Önder, & Treiblmaier, 2018): (i) the security of information through the use of encryption; (ii) transparency of information, because all partners can access it and verify transactions; (iii) trust between parties without the use of an intermediary, because the blockchain is decentralized and is accessed and copied by any node on the network; (iv) the immutability of the information, given the structure of the blockchain.

Blockchain technology will have a disruptive effect on tourism activity, since it will cause changes in the distribution chain, in the relationship between stakeholders, enhancing the emergence and disappearance of stakeholders, through a digital transformation that is increasingly accentuated in companies and society, as well as it will help to protect the personal data of customers used to carry out digital marketing campaigns, as well as in offering promotions according to their characteristics.

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