



BLOCK CHAIN AND TOURISM: THE FUTURE PERSPECTIVES

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Abstract

In recent years, blockchain technology has attracted interest from a wide range of sectors and companies. This is mostly because of the huge potential it holds for transforming data storage and use, improving security and transparency, and streamlining transactions. Given the lightning-fast development of blockchain technology and the tendency to raise awareness of its advantages in the travel and tourism industry. Travelers will not need to worry about Blockchain providing security and transparency to several crucial touchpoints because this technology promises to enhance transparency and security in transactions. When responsibility spreads across the network, blockchain can increase the security and transparency of booking rooms and flights. With blockchain, all data that appears on the network is transparent, trustworthy, and secure, enhancing customer confidence and attaining greater transparency. The objective of this study is to describe the characteristics and future perspectives of blockchain technology in the travel and hospitality sectors and how those sectors are impacted. The information gathered from secondary sources is the foundation of this study.

Keywords: Blockchain Technology, Tourism, Hospitality, Blockchain Application.

Introduction

Blockchain is now considered a disruptive and revolutionary technology with a significant impact on many facets of our life, not only bitcoin or cryptocurrencies in general. One may compare the revolutionary potential of this technology to the revolution brought on by the World Wide Web and the Internet in general. Blockchain technologies can be considered as a way to introduce the next level, just like the Internet can be seen as a way to share information: Blockchain makes it possible to share value. (Ragnedda, M., & Destefanis, G. 2019).

The premise behind the creation is that blockchain technology functions without a main authority and yields the same result whether accessed from different devices, as opposed to a centralised computer that manages the entire programme. This feature is called decentralization (Hirsh & Alman, 2020). The term "blockchain" describes a system made up of different blocks that serve as data storage and are connected by a chain. The design can be compared to a network, with each block including information about an operation that enables the technology to confirm whether an activity is authentic (Chuen, 2015). Every transaction contains a hash, which helps the software encrypt the content. A hash is a distinctive identifier made up of a combination of letters. This lessens the likelihood of duplicate payment situations, which are frequent in other types of online transactions (Hirsh & Alman, 2020).

Consensus is the issue that a blockchain solves. By incorporating components that will cause upheaval in the financial sector, it revolutionises the idea of trust. Hence, the first idea that may be applied to such technology is currency, although this is merely the basis. The Bitcoin electronic payment system was created in 2008 by Satoshi Nakamoto with the intention of creating digital coins that are controlled by a decentralised network rather than a single issuing entity like a bank or government (Ragnedda, M., & Destefanis, G. 2019).

The promise of blockchain technology is now being realised through its use in a range of other sectors as a result of its global prominence in 2017 (Boucher, Nascimento, & Kritikos, 2017), includes government, supply chain and logistics, entertainment, healthcare, and the financial industries (Schlegel, Zavolokina, & Schwabe, 2018), as well as tourism (Kwok & Koh, 2018; Onder & Treiblmaier, 2018). The security and stability of all transactions are guaranteed by the distributed, secure, and unchangeable public ledger provided by blockchain technology. This ledger's decentralised architecture ensures that no data saved there is ever unintentionally lost, destroyed, or subject to virus attack, and that even the minute details of transactions can be tracked. The risk of losing a tourist's personal information exists since the travel and tourism businesses must exchange customer information with several vendors. This industry also depends heavily on financial transactions and the money lost as a result of transaction fees. (Ngoc Thuyen Ngo 2022).

As consumer expectations and preferences are always changing, the hotel and tourism industry is very competitive (Hu et al., 2019). To satisfy their clients and set themselves apart from rival brands, hospitality and tourist businesses must embrace innovation and employ cutting-edge technology. The quick growth of smart technology over the last ten years has changed this market. In other words, technological advancements have given businesses new chances to better understand and engage with consumers in real-time, offer more individualised and contextualised services, and maximise resource use (Buhalis and Sinarta, 2019). The growth of "smart hospitality and tourism" has been encouraged by the increasing usage of smart technology for operations and management. (Buhalis and Leung, 2018; Li et al., 2017; Mehraliyev et al., 2019).

Review of literature

Blockchain is frequently referred to be the technology that drives Bitcoin (Narayanan and Clark 2017). The fundamental qualities of the blockchain may be used to infer additional attributes. One of the most crucial is (distributed) trust, which refers to the partial replacement of confidence in individuals or organisations with trust in systems based on blockchain technology where data is permanently recorded and algorithms are automatically carried out. Blockchain technology, however, is not able to address every issue with trust. Blockchain's immutability can have severe consequences if the data is inaccurate or the law is broken, but it cannot ensure the correctness of the data (H. Treiblmaier 2020).

Önder (2018) suggest on blockchain's effects on the travel and tourism sector, this sector will see more disintermediation as a result of blockchain technology. Kwok and Koh (2018) point out focus especially on the potential transformative effects of blockchain technology for the growth of the tourist industry on tiny island economies. Inventory management, credential administration, digital payments, loyalty programmes, identity management, and bookings and tickets were the six primary impact areas that they highlighted. Regarding blockchain technology for smart cities and smart tourism, Nam et al. (2019) explain the most recent developments and obstacles and provide research hypotheses that predict the creation of new market structures and business models. There are several other potential blockchain applications outside of the tourist and hospitality sectors. Passports and any other identification-related documents, such as birth certificates and driver's licences, can be replaced with digital IDs (Davidson et al., 2016; Dogru et al., 2018).

Blockchain technology's economic and technological paradigm change is upending the conventional tourist and hospitality industry because it enables the switch from a centralised server-based internet infrastructure to a transparent cryptographic network (Sabeti et al., 2019; Flecha-Barrio et al., 2020).



Due to inefficiencies in the finance and banking sectors, online travel agencies' (OTA) wireless transmissions have difficulties with transaction costs. By eliminating middlemen, blockchain technology may easily address these issues. Blockchain has the potential to change the travel and hospitality industries by making it easier to identify visitors (travellers) digitally, boosting provenance, and facilitating efficient identity, inventory, and credential management (Erceg, Damoska Sekuloska, and Kelic, 2020). Since it is expected that more DApps will be introduced to the market, which will streamline the implementation of smart cities and smart tourism, the diverse features of DApps, which use smart contracts and cryptocurrencies, facilitate the creation of new business models, which will improve and enhance current business practises. This will benefit citizens and travellers equally (Ngoc Thuyen Ngo 2022).

In the paper "Can all sectors of the hospitality and tourism industry be influenced by the innovation of Blockchain Technology?", Paul A. Willie states that Blockchain technology has become the "in vogue" hospitality industry office buzzword. The hospitality sector is currently utilising blockchain technology for tactical and strategic reasons, such as increasing operational effectiveness, efficiency, and overall profitability. This article offers a basic explanation of how Blockchain technology works and how it might be used to the worldwide hospitality sector. It offers helpful illustrations of how Blockchain technology might be applied to enhance innovation in the hospitality business across several industrial sectors. In time, it is anticipated that blockchain technology will continue to progress and become more complex. This essay, which is a unique work on the subject, advances knowledge about blockchain technology applications, adds to the literature in that area, and benefits the global hospitality sector. It shows present and potential uses that the hospitality sector and academia can should take into account. (Jayawardena, C. 2019).

The hotel sector has a fantastic chance to eliminate middlemen from the reservation process thanks to blockchain technology. Even though several programmes to encourage direct booking have been undertaken, intermediaries now control the largest portion of the travel booking industry (Carlino, 2018). By implementing a blockchain-based reservation system, platform operators might be entirely or partially replaced, creating a setting like to Airbnb but without Airbnb itself (Chafik, 2018). As a "blockchain for one" does not make much sense, numerous hotel owners must collaborate to create a fully decentralised booking platform. Alternatively, a blockchain-based booking platform might eventually assist hotels in providing their own booking network by fostering collaboration and the shared desire to cut out the middlemen (Sorrells, 2018).

A blockchain-based booking system has several advantages for both parties. For instance, they contain identification verification. This would imply that when making a reservation using the blockchain, the identity of the individual making the reservation may be checked and verified without requiring an external passport check. Additionally, a blockchain hotel booking system is anticipated to have risk reduction and secure payment methods (Tapscott and Tapscott, 2016).

On their trip, travellers frequently need to produce documents. Blockchain enables the addition of transaction data to all nodes and the permanent recording and archiving of all travel documentation (Bodkhe et al., 2019). Passengers may be verified more promptly at every stage of their journey, and document loss or theft can be avoided, assuring excellent travel and a more pleasant customer experience (Thees et al., 2020).

The enormous amount of current research in smart hospitality and tourism has been reviewed in a number of papers. (Mehraliyev et al. 2019) identify publication volume and cooperation trends, co-authors' social network structures, important disciplines, themes, methodologies, and contexts, a thorough quantitative evaluation of the literature on smart tourism related articles was conducted (Palomo, J., Andreu, L., & Figueroa-Domecq, C. 2020).

Research Methodology

A technique for finding, selecting, analysing, and synthesizing the relevant papers on a certain subject is called a systematic review literature. It should be conducted in a methodical, transparent, and repeatable way that yields a comprehensive, in-depth, and excellent evaluation of the study issue under discussion (Christofi et al., 2019). To accomplish these goals, a specific methodology that guarantees research quality and guards against the loss of scientific data was used in this work. Blockchain technology was examined, with a focus on how it is applied in the travel and tourism sector to improve agency services and the caliber of travel for visitors. This is a result of the substantial and expanding body of academic literature on the application of BC technology that is available in numerous databases. Science Direct, Scopus, and Web of Science were chosen among a number of academic research-supporting resources as the primary databases for the data used in this study.

Result and Conclusion

Although blockchain is still a relatively new technology, its standards and variants are still being developed. Hence, it may be argued that, at least until the arrival of further developments, the recently developed blockchain technology is only practical for specific applications. However according to Dogru et al. (2018), as more hospitality businesses implement blockchain technology, all parties involved in the sector will gain from it. Moreover, blockchain technology, according to Rebrisoreanu et al. (2018), will play a significant role in the provision of public goods. If blockchain is more suitable than any other prior technologies is a relevant topic in this regard. In conclusion, we contend that there is a possibility for more prosperous blockchain applications in the travel and tourism sector; nonetheless, more organized study is required to significantly influence the growth process. The findings of this research also show how blockchain technology can heighten disintermediation. The following qualities and advantages must be present for this disintermediation, though: immutability, security, transparency, privacy, and traceability.

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