

Chapter 18

Implications of Blockchain Technology– Based Cryptocurrency in the cloud for the Hospitality Industry

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ABSTRACT

In various industries, blockchain technology and cryptocurrencies have gained significant importance. This study delves into the crucial role played by blockchain-based cryptocurrencies within the hospitality sector. The significance of this research lies in its aim to address inefficiencies, boost security, and adapt to the evolving landscape within the hospitality industry. The industry's heavy reliance on centralization poses challenges, including steep transaction costs, vulnerabilities in data security, and a lack of transparency. Blockchain technology and cryptocurrencies offer solutions to simplify processes, safeguard data, and enable secure, cost-efficient transactions. This paper highlights the increasing importance of blockchain-based solutions in hospitality, underscoring industry stakeholders' need to embrace these innovations. Through an analysis of implications, advantages, and obstacles, this study adds depth to our comprehension of how blockchain-based cryptocurrencies can enhance the hospitality sector's efficiency, security, and competitiveness.

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INTRODUCTION

Blockchain technology and cryptocurrencies have moved beyond their initial origins as niche discoveries to emerge as disruptive forces across various industries (Sánchez, 2022). This study digs into the critical role that blockchain technology-based cryptocurrencies play in the hotel industry, exploring their historical evolution, recent advancements, and future possibilities. The drive for this study stems from the imperatives of eliminating inefficiencies, bolstering security, and adjusting to a dynamically shifting terrain within the hospitality business (Talukder et al., 2022). The hospitality industry, known for its sophisticated web of service providers, intermediaries, and payment systems, has several issues stemming from its centralization (Hameed et al., 2022). These difficulties include increased transaction costs, susceptibility to data breaches, and a noteworthy lack of transparency. Against this context, blockchain technology and cryptocurrencies emerge as disruptive alternatives, giving a multidimensional solution to the sector's long-standing problems. In this endeavor, we set out to investigate the numerous dimensions of this confluence. We begin by clarifying the fundamental concepts of blockchain technology and the transformational potential of cryptocurrencies. From there, we examine the historical roots of these breakthroughs, documenting their journey from conception to current popularity. This historical viewpoint provides critical insights into these technologies' rapid emergence and maturation.

While the review exposes the past, our investigation does not stop there. Instead, we turn to the present day, when recent blockchain and cryptocurrency technology developments have sparked a wave of creativity. Notably, Ethereum's introduction of smart contracts in 2015 and the following rise of Initial Coin Offerings (ICOs) have made blockchain valuable for more than just digital currencies (Hewa et al., 2021). This change emphasizes the dynamic character of blockchain technology and its capacity for constant reinvention (Brody & Couture, 2021). As we look ahead, the importance of this research becomes clearer.

Blockchain and cryptocurrency are not merely abstract concepts; they are active forces influencing the present and future of the hospitality industry (Bagloee et al., 2021). The advantages they provide, ranging from increased security and trust to simplified financial transactions, are strong reasons to study their potential in hospitality (Talukder et al., 2023). This study's significance extends beyond academic investigation; it has far-reaching ramifications for industry stakeholders. It emphasizes the importance of firms in the hotel sector adapting to and embracing blockchain-based solutions (Wang et al., 2022). As our investigation progresses, we will shed light on the consequences, benefits, and obstacles of incorporating blockchain technology-based cryptocurrencies within the sector. By doing so, we contribute to a better understanding of how these technologies may empower the industry by increasing efficiency, fortifying security, and boosting competitiveness in an increasingly digital environment. So, this study is like a lighthouse, pointing industry leaders toward a future where the hospitality industry can fully use blockchain technology and cryptocurrencies to meet the changing needs of a modern, tech-savvy clientele.

LITERATURE REVIEW

This literature study investigates the role of blockchain-based cryptocurrencies in the hospitality industry to establish context, identify significant trends, highlight difficulties and solutions, and identify research needs. Because blockchain and cryptocurrencies have evolved beyond their financial origins, this review contextualizes their historical progression and adaptation within the broader environment of the hospi-

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