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# BLOCKCHAIN FOR MARKETING: MOVING BEYOND HYPE TO APPLICATIONS IN PROVENANCE, LOYALTY, AND COUNTERFEIT PREVENTION

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**Abstract**

This article examines the role of blockchain technology in marketing, moving beyond initial hype to explore its practical applications in provenance, loyalty programs, and counterfeit prevention. As blockchain matures, its core features—transparency, decentralization, and immutability—offer new opportunities to address longstanding challenges in marketing. Drawing on a narrative literature review and case-based analysis, this study identifies how blockchain enhances product traceability, enabling greater supply chain visibility and strengthening consumer trust through verifiable provenance. In loyalty programs, blockchain introduces tokenized and decentralized reward systems that increase flexibility, interoperability, and customer engagement. Additionally, blockchain-based authentication systems play a critical role in preventing counterfeiting, protecting brand equity, and ensuring consumer safety. The study also highlights key moderating factors, including technology adoption readiness, consumer awareness, and industry-specific requirements, which influence the effectiveness of blockchain applications. A conceptual framework is proposed to illustrate how blockchain-driven transparency and trust translate into improved marketing outcomes. This research contributes to bridging the gap between theoretical potential and real-world implementation, offering practical insights for marketers. Ultimately, blockchain's value in marketing lies in its ability to deliver trust, enhance transparency, and create more secure and consumer-centric ecosystems.

**Keywords:** *blockchain marketing; provenance; loyalty programs; counterfeit prevention; consumer trust*

## INTRODUCTION

The rapid rise of blockchain technology has captured significant attention across multiple industries, including finance, supply chain management, healthcare, and increasingly, marketing. Originally developed as the underlying technology for cryptocurrencies, blockchain has evolved into a broader innovation characterized by decentralization, transparency, and immutability (Ajayi-Nifise et al., 2024). These features enable secure and verifiable record-keeping, which can enhance trust and accountability in various applications. As organizations seek to improve data integrity and consumer trust, blockchain has emerged as a promising solution. Its potential to transform how information is shared and verified has led to widespread interest among businesses and researchers (Westerlund et al., 2021). Consequently, blockchain is increasingly being explored as a tool for enhancing marketing practices and consumer engagement.

Despite this growing interest, the early discourse surrounding blockchain was often dominated by hype and exaggerated expectations. Many initial claims suggested that blockchain would revolutionize all aspects of business, including marketing, without clearly defining practical use cases (Akram et al., 2024). However, as the technology has matured, organizations have begun to move beyond theoretical discussions toward real-world implementation. This shift has revealed both the opportunities and limitations of blockchain in marketing contexts. While some applications have demonstrated tangible value, others have faced challenges related to scalability, cost, and integration (Oriekhoe et al., 2024). As a result, there is a growing need to critically assess where blockchain can

genuinely add value. This transition from hype to practical adoption marks an important stage in the evolution of blockchain in marketing. A key issue in this domain is the gap between the theoretical potential of blockchain and its actual application in marketing practice. Although blockchain offers capabilities such as enhanced transparency and secure data management, many organizations struggle to translate these features into effective marketing strategies (Stallone et al., 2021). The lack of clear frameworks and empirical evidence further complicates adoption. Additionally, marketers often face uncertainty regarding how to integrate blockchain with existing systems and processes. This disconnect highlights the need for a more grounded understanding of blockchain's role in marketing. Without such clarity, the technology risks being underutilized or misapplied. Addressing this gap is essential for unlocking the true value of blockchain in marketing (Tan & Saraniemi, 2022).

In response to these challenges, this article aims to examine practical applications of blockchain in marketing, focusing on three key areas: provenance, loyalty programs, and counterfeit prevention. These domains represent areas where blockchain's core features can be directly applied to address real-world problems. By analyzing these use cases, the study seeks to demonstrate how blockchain can enhance transparency, trust, and efficiency in marketing activities. The article also aims to move beyond abstract discussions by providing concrete insights into implementation and impact. Through a structured analysis, it contributes to both academic understanding and managerial practice. Ultimately, the study seeks to provide a clearer and more actionable perspective on the role of blockchain in modern marketing.

## LITERATURE REVIEW

### Blockchain in Marketing

The introduction of blockchain technology into marketing was initially accompanied by high expectations and significant hype. Early discussions often positioned blockchain as a revolutionary tool capable of transforming digital advertising, customer data management, and brand–consumer relationships (Daraojimba et al., 2024). It was promoted as a solution to major issues such as data privacy, ad fraud, and lack of transparency in digital ecosystems. Many proponents argued that blockchain could eliminate intermediaries, giving consumers greater control over their data while improving efficiency for marketers. However, these claims were often broad and lacked concrete implementation strategies (Melendez et al., 2024). As a result, much of the early enthusiasm was driven more by theoretical potential than practical evidence. This led to inflated expectations that were difficult to meet in real-world applications.

Over time, the focus has shifted from speculative potential to emerging real-world applications of blockchain in marketing. Organizations are increasingly experimenting with specific use cases where blockchain's features provide clear value. For example, blockchain is being used to improve transparency in digital advertising by tracking ad delivery and reducing fraud (Hakkarainen & Colicev, 2023). It is also applied in customer data management, enabling secure and consent-based data sharing. These practical implementations demonstrate that blockchain's impact is most effective when applied to well-defined problems. While adoption remains limited, these early applications provide valuable insights into how blockchain can be integrated into marketing strategies (Batwa & Norrman, 2021). This shift toward practical use marks a more realistic and sustainable phase in the evolution of blockchain in marketing.

### Provenance and Supply Chain Transparency

Provenance and supply chain transparency represent one of the most promising applications of blockchain in marketing. Blockchain enables the tracking of a product's origin and lifecycle by recording each transaction and movement in a secure and immutable ledger (Kumar et al., 2025). This allows organizations to provide detailed information about where a product comes from, how it was produced, and how it reached the consumer. Such transparency is particularly valuable in industries like food, fashion, and luxury goods, where authenticity and ethical sourcing are critical concerns. By making supply chain information accessible, blockchain helps reduce information asymmetry between brands and consumers. This enhances accountability and reduces the risk of fraud or misrepresentation (Wang et al., 2021). As a result, blockchain-based provenance systems can significantly improve supply chain visibility.

Enhancing consumer trust through traceability is a key benefit of blockchain-enabled provenance. When consumers can verify the authenticity and origin of a product, they are more likely to trust the brand and its claims. This is especially important in markets where concerns about sustainability, ethical sourcing, and product quality are increasing (Wasiq et al., 2023). Blockchain allows consumers to access verified information through digital interfaces, such as QR codes or mobile applications. This transparency not only builds trust but also supports

informed decision-making. Additionally, it enables brands to differentiate themselves by demonstrating accountability and integrity (Jain et al., 2021). By strengthening trust, blockchain-based traceability can contribute to stronger brand loyalty and customer relationships.

### Blockchain-Based Loyalty Programs

Blockchain technology is transforming traditional loyalty programs through the introduction of tokenization and digital rewards. In conventional loyalty systems, rewards are often limited to specific brands and are difficult to transfer or redeem across platforms. Blockchain enables the creation of digital tokens that can represent loyalty points, offering greater flexibility and usability (Marthews & Tucker, 2022). These tokens can be securely stored, transferred, and exchanged within a blockchain network, providing a more seamless user experience. Tokenization also allows for real-time tracking and redemption of rewards, improving efficiency and transparency. As a result, blockchain-based loyalty programs can enhance customer engagement by making rewards more accessible and valuable (Gupta & Bansal, 2021). This innovation represents a shift toward more dynamic and user-centric loyalty systems.

The development of interoperable and decentralized loyalty ecosystems further expands the potential of blockchain in this area. Unlike traditional systems, blockchain-based loyalty programs can operate across multiple brands and platforms, allowing consumers to use their rewards in a broader ecosystem (Eido & Zeebaree, 2025). This interoperability increases the perceived value of loyalty points and encourages greater participation. Decentralization also reduces reliance on a single organization, enhancing security and trust in the system. Consumers gain more control over their rewards, while brands can collaborate to create shared value (Baiod et al., 2021). However, implementing such ecosystems requires coordination and standardization across stakeholders. Despite these challenges, blockchain-based loyalty programs offer a promising approach to redefining customer engagement and retention.

## METHODOLOGY

This study adopts a narrative literature review combined with a case-based analytical approach to examine the practical applications of blockchain in marketing. Given the evolving nature of blockchain technology and its relatively recent integration into marketing practices, a narrative approach allows for flexibility in synthesizing insights across diverse sources. In addition to academic literature, the study incorporates selected case studies to illustrate real-world implementations of blockchain in areas such as provenance, loyalty programs, and counterfeit prevention. This approach enables a more comprehensive understanding by bridging theoretical perspectives with practical examples. Sources are selected from peer-reviewed academic journals, industry reports, and documented blockchain case studies to ensure both rigor and relevance. Inclusion criteria focus on studies and reports that explicitly address marketing-related applications of blockchain technology. The analytical approach is based on thematic synthesis, which identifies recurring patterns, key themes, and emerging trends across the selected literature.

Despite its strengths, this methodological approach is subject to certain limitations. As blockchain in marketing is still an emerging field, the availability of empirical studies and long-term data is relatively limited. Many existing sources are exploratory or conceptual, which may affect the depth of evidence supporting certain conclusions. Additionally, case studies may reflect specific industries or contexts, limiting the generalizability of findings. The narrative nature of the review also introduces the potential for selection bias, as it does not follow a strictly systematic protocol. Furthermore, rapid technological advancements may render some findings outdated as new applications and innovations emerge. Nevertheless, this approach provides valuable insights into current developments and practical applications of blockchain in marketing. It offers a foundation for future empirical research and more systematic investigations.

## RESULTS AND DISCUSSION

### Blockchain for Provenance

Blockchain technology plays a critical role in enhancing product traceability and supply chain visibility by providing a transparent and immutable record of transactions. Each stage of a product's journey—from raw material sourcing to final delivery—can be recorded on a blockchain, allowing stakeholders to verify its origin and movement (Mamulak et al., 2024). This level of visibility reduces information asymmetry and enables real-time tracking of goods across complex supply chains. For industries such as food, pharmaceuticals, and luxury goods, this capability is particularly valuable in ensuring quality and authenticity. By leveraging blockchain, organizations can detect inefficiencies, prevent fraud, and improve operational accountability (Peres et al., 2022). This creates a more reliable

and transparent supply chain system. As a result, blockchain-based provenance systems are increasingly being adopted to address critical challenges in product verification. The impact of blockchain-enabled traceability extends significantly to brand trust and ethical consumption. Consumers today are more concerned about sustainability, ethical sourcing, and product authenticity, and blockchain provides verifiable evidence to support brand claims. By offering transparent access to product information, brands can strengthen consumer confidence and differentiate themselves in competitive markets (Stallone et al., 2023). This transparency also empowers consumers to make more informed purchasing decisions aligned with their values. Additionally, blockchain can support certifications related to fair trade, environmental standards, and labor practices. These capabilities enhance the credibility of ethical marketing initiatives (Silva & Moro, 2021). Ultimately, improved traceability contributes to stronger brand loyalty and long-term customer relationships.

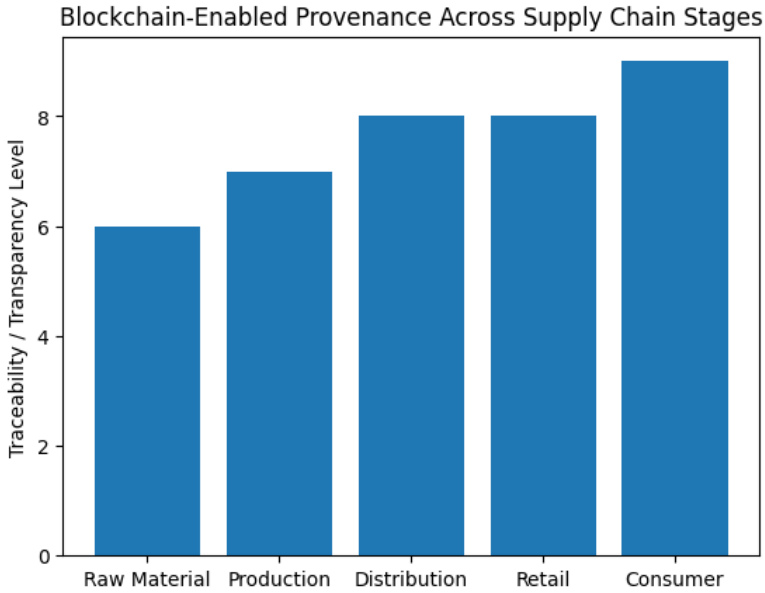


**Figure 1.** Blockchain-Enabled Provenance and Traceability Across Supply Chain Stages

Figure 1 illustrates how blockchain technology enhances traceability and transparency across different stages of the supply chain, from raw material sourcing to final consumption. The increasing levels shown across stages indicate that blockchain creates a cumulative effect, where each additional layer of recorded data strengthens overall visibility (Afif & Susanto, 2025). Early stages such as raw material and production benefit from improved tracking and verification, while later stages such as retail and consumer access provide greater transparency and trust. The highest impact at the consumer level reflects the importance of accessible and verifiable information in shaping purchase decisions (Akinoso et al., 2023). By connecting all stages into a unified and immutable system, blockchain reduces information asymmetry and enables real-time tracking of products. This integrated visibility supports brand credibility and reinforces claims related to authenticity and ethical sourcing (Bakpayev et al., 2020). Overall, the figure demonstrates that blockchain-based provenance systems not only improve operational transparency but also play a critical role in building consumer trust and informed consumption.

**Blockchain in Loyalty Programs**

Blockchain technology is transforming loyalty programs through the introduction of decentralized rewards and token-based incentives. Traditional loyalty systems are often fragmented, with limited interoperability and restricted redemption options (Ajayi-Nifise et al., 2024). Blockchain enables the creation of digital tokens that can represent loyalty points, allowing for secure, transparent, and flexible reward systems. These tokens can be exchanged across platforms, transferred between users, or redeemed in real time. Decentralization reduces dependency on a single organization, enhancing system reliability and user control (Westerlund et al., 2021). This innovation also enables brands to design more dynamic and personalized reward structures. As a result, blockchain-based loyalty programs offer a more engaging and efficient alternative to conventional systems.

The use of blockchain in loyalty programs can significantly increase customer engagement and retention. By providing more valuable and flexible rewards, organizations can encourage repeated interactions and long-term

relationships with customers (Akram et al., 2024). The transparency of blockchain ensures that reward accumulation and redemption are clear and trustworthy, reducing customer frustration. Additionally, token-based systems can incorporate gamification elements, further enhancing user engagement. Interoperable loyalty ecosystems allow consumers to use rewards across multiple brands, increasing perceived value (Oriekhoe et al., 2024). This encourages broader participation and strengthens brand ecosystems. Overall, blockchain-enabled loyalty programs have the potential to redefine customer engagement strategies in marketing.

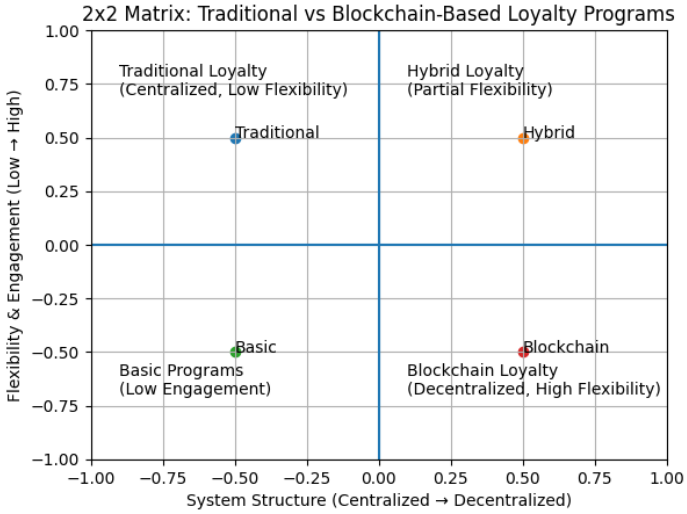


**Figure 2.** 2×2 Matrix of Traditional vs. Blockchain-Based Loyalty Programs: Structure and Engagement Dynamics

Figure 2 presents a comparative framework that highlights the structural and engagement differences between traditional and blockchain-based loyalty programs. The horizontal axis illustrates the shift from centralized to decentralized systems, while the vertical axis captures the progression from low to high flexibility and customer engagement. Traditional loyalty programs are positioned in the upper-left quadrant, reflecting their centralized nature and limited interoperability, which can constrain user experience. In contrast, blockchain-based loyalty programs occupy the lower-right quadrant, emphasizing their decentralized structure, greater flexibility, and higher engagement potential through tokenization and interoperability (Stallone et al., 2021). The hybrid quadrant indicates transitional models that incorporate some blockchain features but retain partial centralization. The basic programs quadrant represents low-value systems with minimal engagement, underscoring the limitations of outdated approaches. Overall, the figure demonstrates that blockchain-enabled loyalty systems offer a more dynamic, transparent, and user-centric model, positioning them as a superior strategy for enhancing customer engagement and retention (Tan & Saraniemi, 2022).

**Counterfeit Prevention Applications**

Counterfeit prevention is another key area where blockchain technology offers significant value in marketing. By enabling product authentication and verification systems, blockchain ensures that each product can be uniquely identified and tracked. Digital records stored on the blockchain can verify the authenticity of goods, making it difficult for counterfeit products to enter the market (Daraojimba et al., 2024). Consumers can access this information through tools such as QR codes or mobile applications, allowing them to confirm product legitimacy. This is particularly important in industries such as luxury goods, electronics, and pharmaceuticals, where counterfeiting poses serious risks. Blockchain provides a secure and tamper-proof system for validating product authenticity (Tan & Saraniemi, 2022). As a result, it helps protect both consumers and brands from fraudulent activities. The prevention of counterfeiting has a direct impact on protecting brand equity and ensuring consumer safety. Counterfeit products can damage a brand's reputation by undermining trust and reducing perceived quality. By implementing blockchain-based verification systems, brands can safeguard their identity and maintain consumer confidence (Daraojimba et al., 2024). Additionally, ensuring product authenticity is critical for consumer safety, particularly in sectors such as healthcare and food. Blockchain enables rapid identification and removal of counterfeit goods from the supply chain. This proactive approach reduces risks and enhances regulatory compliance (Melendez

et al., 2024). Ultimately, blockchain-based anti-counterfeiting measures strengthen brand integrity and consumer protection.

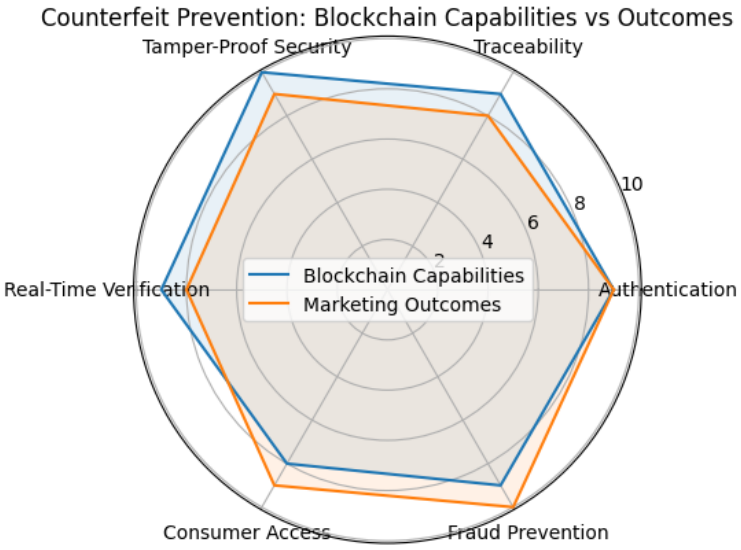


**Figure 3.** Double Radar Chart of Blockchain Capabilities and Marketing Outcomes in Counterfeit Prevention

**Moderating Factors**

The effectiveness of blockchain applications in marketing is influenced by several moderating factors, including technology adoption readiness. Organizations vary in their ability to implement blockchain solutions, depending on factors such as infrastructure, expertise, and financial resources. Companies with higher technological readiness are more likely to successfully integrate blockchain into their marketing strategies (Hakkarainen & Colicev, 2023). Conversely, organizations with limited resources may face challenges in adoption and implementation. This disparity highlights the importance of organizational capability in determining the success of blockchain initiatives. Additionally, the complexity of blockchain technology may create barriers for both businesses and consumers. Addressing these challenges is essential for widespread adoption (Batwa & Norrman, 2021).

Consumer awareness and trust also play a crucial role in shaping the impact of blockchain in marketing. For blockchain applications to be effective, consumers must understand and trust the technology. Limited awareness or misconceptions about blockchain may reduce its perceived value. Industry-specific requirements further influence adoption, as different sectors face unique challenges and regulatory conditions (Kumar et al., 2025). For example, industries with strict compliance standards may require additional safeguards and verification processes. Cultural and contextual factors may also affect how blockchain is perceived and adopted. These moderating variables demonstrate that the success of blockchain in marketing is not uniform across contexts (Wang et al., 2021). Understanding these factors is essential for designing effective and scalable blockchain solutions.

## CONCLUSION

The findings of this study demonstrate that blockchain technology has moved beyond its initial hype and is increasingly finding practical applications in marketing. By focusing on provenance, loyalty programs, and counterfeit prevention, the analysis highlights how blockchain's core features—transparency, immutability, and decentralization—can address real-world marketing challenges. In particular, blockchain enhances product traceability, enabling brands to build trust through verifiable information and support ethical consumption. In loyalty programs, it introduces more flexible, transparent, and interoperable reward systems that improve customer engagement and retention. Additionally, blockchain-based authentication systems play a critical role in combating counterfeiting, protecting both brand equity and consumer safety. These applications illustrate that blockchain's value lies not in abstract potential but in its ability to solve specific problems. Overall, the study underscores the importance of adopting a targeted and application-oriented approach to blockchain in marketing.

From a theoretical perspective, this research contributes by bridging the gap between conceptual discussions of blockchain and its practical implementation in marketing contexts. It provides a structured understanding of how blockchain can create value through trust, transparency, and consumer empowerment. Practically, the findings offer

guidance for organizations seeking to integrate blockchain into their marketing strategies, emphasizing the need to align technology adoption with business objectives and consumer expectations. However, the study is limited by the emerging nature of the field and the relatively limited availability of empirical evidence. Future research should focus on longitudinal studies, cross-industry comparisons, and the evaluation of consumer responses to blockchain-enabled marketing initiatives. Additionally, further exploration of regulatory, technological, and cultural factors will be essential for scaling adoption. Ultimately, the successful use of blockchain in marketing will depend on its ability to deliver tangible value while maintaining trust and usability for both businesses and consumers.

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