



## THE INFLUENCE OF BLOCKCHAIN TECHNOLOGY AND DIGITAL MARKETING ON BANKING SERVICES: A SYSTEMATIC REVIEW

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### ABSTRACT

*This study seeks to methodically analyze the impact of blockchain technology and digital marketing tactics on the enhancement of banking services in the digital age. Digital transformation necessitates that banks not only implement cutting-edge technologies to improve transaction efficiency and security but also establish robust contact with clients to foster loyalty and confidence. This study utilizes a Systematic Literature Review (SLR) methodology by examining 25 pertinent scientific articles from 2018 to 2024, sourced from prominent sources including Google Scholar, Scopus, and DOAJ. The study's findings demonstrate that blockchain facilitates the acceleration of service processes, improves transparency, and fortifies data security, whereas digital marketing substantially enhances customer engagement, satisfaction, and loyalty via personalized and educational communication strategies. The amalgamation of the two fosters a synergy that propels the advancement of efficient, trustworthy, and adaptive banking services tailored to the requirements of the digital generation. This research offers both theoretical and practical insights into banking service developments and acts as a reference for industry stakeholders and policymakers in advancing the digitization of the financial sector.*

**Keywords:** Blockchain, Digital Marketing, Loyalitas Nasabah, Systematic Literature Review

## 1. INTRODUCTION

The advancement of information technology has catalyzed substantial change in both the global and national banking sectors. Two significant developments in this transformation process are blockchain and digital marketing (Fatkhan & Chasanah, 2024). Blockchain technology provides a decentralized, transparent, and immutable mechanism for recording transactions, significantly boosting the efficiency and security of financial operations (Aminin, 2024). Conversely, digital

marketing enables banks to engage clients in a more personalized, rapid, and interactive fashion using diverse digital platforms, including social media, email, and mobile applications.

Indonesian banking, particularly Bank Permata, has commenced the integration of blockchain technology in financial service operations such as Letters of Credit (LC), while employing digital marketing methods to engage the younger generation (Gen Z), who are well-versed in the digital realm. The degree to which the synergy of these two technologies influences the enhancement of banking service quality requires thorough and methodical investigation. Several primary difficulties can be recognized as the focal points of this research based on the provided background description. Initially, it is essential to examine the degree to which blockchain technology enhances efficiency, security, and transparency in the delivery of banking services. Secondly, it is crucial to comprehend how digital marketing can augment client acquisition, service happiness, and customer loyalty inside the competitive landscape of the digital banking sector. Third, it is essential to investigate the potential synergistic link between the deployment of blockchain technology and digital marketing techniques in enhancing the quality and competitiveness of digital banking services overall. Fourth, it is crucial to comprehend how prior research findings illustrate the influence of these two technologies on the functioning of financial institutions, both operationally and from the customer's perspective.

Prior studies indicate that blockchain technology can expedite transactions and improve the trustworthiness of banking data (Zamzam, Mahdi, & Ansar, 2023). Digital marketing has demonstrated efficacy in attracting and maintaining clients via a more personalized and engaging methodology (Putra, Way, Ricky, Esfandiany, & Eryc, 2024). Numerous literature studies emphasize that the digital generation, especially Gen Z, exhibits a greater inclination towards app-based and digital financial services. The integration of digital technology and marketing tactics is essential for capturing their interest (Sudirjo, Purwati, Widyastuti, Budiman, & ..., 2023). Despite numerous studies addressing the subject, there remains a paucity of research that comprehensively examines the interplay between blockchain and digital marketing in the holistic enhancement of banking service quality.

This research is significant due to the absence of extensive studies connecting blockchain technology with digital marketing within the banking services sector. This article aims to provide a thorough synthesis of existing research through the Systematic research Review technique, serving as a basis for academics, practitioners, and policymakers to develop novel and effective solutions for digital banking services. This research seeks to thoroughly examine the role and influence of blockchain technology on the improvement of financial services, specifically regarding efficiency, transparency, and transaction security. This research intends to evaluate the efficacy of digital marketing techniques in

improving customer happiness and loyalty during the digital revolution of banking. This research seeks to identify the possible synergy between blockchain technology and digital marketing techniques in improving the quality of digital banking services.

## 2. RESEARCH METHOD

This study employs the Systematic Literature Review (SLR) methodology, a structured strategy aimed at identifying, assessing, and synthesizing all research findings pertinent to a particular subject (Erbara & Takdir, 2022). This method aims to deliver a thorough and evidence-based analysis of the impact of blockchain technology and digital marketing on banking services. The initial step in this systematic literature review procedure is the identification of studies. At this juncture, the researcher articulates the research questions with clarity and specificity, aligned with the established study topic. A search for scientific literature is performed using different prominent databases, including Google Scholar, Scopus, Directory of Open Access Journals (DOAJ), and ScienceDirect. The inquiry utilized keywords including blockchain banking, digital marketing finance, digital banking, and financial technology in Indonesia. Boolean operator combinations, such as AND and OR, were utilized to enhance the search results.

Upon the completion of article collection, the subsequent phase is the screening of studies. At this juncture, the researchers delineate inclusion and exclusion criteria. The inclusion requirements encompass publications published from 2018 to 2024, peer-reviewed, authored in Indonesian or English, and directly addressing the correlation between blockchain and/or digital marketing and financial services. The exclusion criteria encompass duplicate papers, those that just address the technical facets of blockchain without relevance to banking services, and opinion or editorial pieces devoid of a robust methodological foundation. From this screening process, 25 papers that satisfy the criteria for further study were acquired. The final phase of this systematic literature review process involves data synthesis and analysis. At this juncture, all chosen papers undergo thematic analysis to discern principal findings. Key themes analyzed encompass: the influence of blockchain on transaction efficiency, transparency, and security; the role of digital marketing in fostering customer loyalty and satisfaction; the amalgamation of blockchain and digital marketing strategies within banking service systems; and the market reaction, especially from Generation Z, to digital banking services.

The analysis involves analyzing the findings of each study, assessing the quality of their methodology, and deriving overarching conclusions that align across multiple sources. This process enables researchers to acquire a comprehensive grasp of the trends, difficulties, and possibilities associated with the implementation of both technologies in the banking sector. The SLR technique

was selected due to its rigorous and transparent methodology for evaluating scientific material, as well as its ability to discover under-researched gaps. Consequently, the findings of this research are anticipated to provide a significant reference for scholars, banking professionals, and policymakers in formulating and advancing digital banking service plans grounded in technological innovation.

**Table1. Articles on Blockchain and Digital Marketing in Banking**

No.	Author & Year	Research Title	Methodology	Key Findings and Results
1	Ata et al., 2022	<i>Blockchain for Banking Security: A Review</i>	Literature Review	Blockchain improves transaction speed, lowers costs, and enhances the security of global financial systems.
2	Judijanto et al., 2024	<i>Blockchain and Financial Reporting Efficiency</i>	Qualitative Case Study	Blockchain adoption improves the speed and accuracy of financial reporting in banking institutions.
3	Al-Ghifari & Khusnudin, 2022	<i>Customer Trust in Blockchain-Based Banking Services</i>	Quantitative Survey	Trust and security are key drivers of customer loyalty in digital banking systems.
4	Zulhelmi et al., 2023	<i>Combining Blockchain and AI to Prevent Fraud in Islamic Banking</i>	Case Study	Integration of blockchain and AI effectively reduces fraud risk and improves data governance.
5	Budiman et al., 2021	<i>Digital Transformation and Blockchain Adoption in Indonesian Banking</i>	Conceptual Paper	Highlights early blockchain adoption in trade finance and digital banking integration.
6	Narayan & Faisal, 2020	<i>Blockchain Adoption in the Financial Sector: Opportunities &amp; Challenges</i>	Literature Review	Major adoption barriers include infrastructure gaps, human resource readiness, and regulatory ambiguity.
7	Chen & Lee, 2019	<i>Smart Contracts in Cross-border Banking</i>	Global Banking Case Study	Smart contracts enhance settlement speed and reduce administrative costs.
8	Kumar et al., 2023	<i>Blockchain-Based Mobile Payments in Emerging Markets</i>	Survey + Interviews	Blockchain wallets improve mobile transaction speed and security in developing countries.
9	Singh & Verma, 2022	<i>Enhancing Trust in Online Banking via Blockchain</i>	Experimental (User Testing)	Customer trust increases when aware of

				blockchain-backed systems.
10	Santos et al., 2021	<i>Blockchain for Compliance in Latin American Banking</i>	Field Study	Helps automate regulatory reporting and strengthens compliance frameworks.
11	Arifin et al., 2020	<i>Digital Marketing in Indonesian Banks: Strategies &amp; Outcomes</i>	Quantitative Survey	Digital campaigns significantly improve brand awareness and customer engagement.
12	Hasbullah, 2022	<i>The Effect of Digital Marketing on Customer Loyalty</i>	Survey + SEM	Personalized email and social media marketing improve customer retention and repeat purchases.
13	UMS, 2023	<i>Effectiveness of Content Marketing in the Banking Sector</i>	Mixed-method	Educational content boosts customer engagement and understanding of digital services.
14	Budiyanto & Sari, 2021	<i>Mobile App Campaigns and Customer Retention</i>	A/B Experiment	Relevant push notifications significantly increase app user retention.
15	Wijaya & Hartono, 2023	<i>Influencer Marketing for Bank Products</i>	Case Study	Banking product interest increases up to 20% via educational influencer campaigns.
16	Patel & Shah, 2022	<i>SEO and Online Visibility in Financial Services</i>	Secondary Data Analysis	SEO raises online visibility, driving traffic and potential customer acquisition.
17	Tan & Lim, 2024	<i>Email Automation in Fintech Marketing</i>	Quantitative Survey	Email automation reduces response time and improves open rates by 35%.
18	Rahmawati & Nugroho, 2021	<i>Digital Engagement and Customer Satisfaction</i>	Survey + Interviews	Two-way interaction on social media improves customer satisfaction and reduces churn.
19	Martinez et al., 2020	<i>Blockchain-Based Loyalty Programs</i>	Latin American Bank Case Study	Token-based loyalty programs improve customer participation and lower operational costs.
20	Huang & Chen, 2022	<i>Transparency in Banking via Blockchain</i>	Empirical (Cross-country)	Public blockchain reporting increases auditing speed and boosts institutional credibility.

21	Irawan & Purnama, 2023	<i>Chatbot and Blockchain for Customer Support</i>	Pilot Study	Chatbots integrated with blockchain secure data history and enhance trust.
22	Gomez & Castillo, 2021	<i>Blockchain Impact on Banking Efficiency</i>	European Banking Survey	Blockchain adoption improves operational efficiency by up to 40%.
23	Safitri & Aulia, 2022	<i>Digital Marketing Analytics in Banking</i>	Digital Analytics	Behavioral insights optimize targeting and reduce marketing costs by 25%.
24	Lee & Kim, 2024	<i>Blockchain Integration in Mobile Banking Apps</i>	East Asia Case Study	Blockchain integration reduces transaction errors by 50% and speeds up in-app processes.
25	Sari & Prasetyo, 2020	<i>Blockchain Adoption Barriers in Indonesian Banking</i>	Survey + Interviews	Key barriers: lack of digital infrastructure, low digital literacy, and underdeveloped regulatory support.

### 3. RESULT AND ANALYSIS

#### *The Impact of Blockchain Technology on Banking Services*

The literature synthesis revealed that blockchain technology significantly enhances the efficiency and security of banking institutions. It has been noted that blockchain obviates the necessity for intermediaries and reduces the risk of data tampering. Anugrah's study demonstrates that blockchain can diminish transaction costs and accelerate cross-border payment operations (Anugrah et al., 2024). Moreover, Judijanto demonstrates that blockchain use in financial reporting significantly enhances data velocity and precision (Judijanto & Ar, 2025). The results corroborate the primary purpose of the research, which is to elucidate the role of blockchain in enhancing service efficiency and quality. Blockchain technology has transformed the operations of financial and banking systems by providing solutions grounded in transparent, efficient, and secure distributed networks (Felicia et al., 2024). In banking services, blockchain facilitates the automated and immutable documentation of transactions, thus diminishing dependence on middlemen. This expedites transaction validation and settlement, simultaneously diminishing operational expenses associated with manual processes or centralized systems susceptible to human mistake.

A primary benefit of blockchain in banking is enhanced operational efficiency. This technology functions autonomously using smart contract mechanisms, which are digital agreements implemented without human involvement, hence streamlining cross-border transaction processes. In fact, international

transactions that typically require days can be finalized in minutes or even seconds (Yulian et al., 2024). This efficiency decreases waiting periods, enhances client happiness, and enables banks to offer round-the-clock services without administrative interruptions. Besides efficiency, cost reduction is a notable advantage of utilizing blockchain. This method obviates the necessity for intermediaries such as clearinghouses, digital notaries, or manual verification authority (Pranowo, 2025). ). A decentralized system can substantially diminish administrative and transaction expenses. This is particularly advantageous in services like foreign money transfers, the issuance of letters of credit, and financial transaction audits.

From a data security standpoint, blockchain provides a data format that is nearly impervious to manipulation (A, 2023). All transactions will be documented in encrypted and interlinked data blocks. Once documented, the data cannot be altered without the consent of the majority of nodes within the network. This assures customers that their transactions are immutable and cannot be modified or erased by any party. This security is essential in the digital age, as cyber threats to financial systems are escalating (Faizal, Faizatul, Asiyah, & Subagyo, 2023). Transparency constitutes a defining attribute of blockchain technology. All authorized parties can authenticate transaction history instantaneously without requiring confirmation from the bank. This transparency fosters trust between the bank and its clients by enabling audits to be performed at any time with precise and comprehensive data (Putri & Hidajat, 2024). This ultimately bolsters the reputation and trustworthiness of financial institutions among the public and regulators.

Judijanto's research substantiates this conclusion, demonstrating that blockchain utilization in the financial reporting process of banks can improve the speed and precision of data verification (Judijanto & Ar, 2025). This is critically pertinent to audits and adherence to banking laws. By maintaining traceable and verifiable data, banks can fulfill reporting responsibilities to authorities more effectively and mitigate the risk of sanctions resulting from reporting inaccuracies. The integration of blockchain in payment systems enhances innovations like e-money, digital wallets, and mobile banking services (Rafidah & Maharani, 2024). Financial institutions can create innovative products that are intrinsically linked to the blockchain network to improve consumer services. Blockchain-based payment systems facilitate online buying, ticket acquisitions, and tax payments, enabling these transactions to be executed more swiftly and securely, devoid of concealed expenses. Numerous banks in Indonesia, such as Bank Permata, have commenced the implementation of blockchain technology for trade finance operations. By collaborating with blockchain networks like as Contour, international letter of credit transactions can be executed digitally and finalized within a few hours. This is a substantial advancement beyond the conventional paper-based documentation procedure that requires several days. This efficiency

benefits not only banks but also business operators and exporters. The implementation of blockchain presents several obstacles. The disparate digital infrastructure, insufficient comprehension among industrial stakeholders, and the nascent regulatory framework present challenges to widespread application (Febrianti & Shadiq, 2025). Consequently, alongside technical considerations, banks must also enhance human resources and communication strategies to ensure clients comprehend the advantages of this new system. The collaboration between technology and education is essential for the success of blockchain-driven digital transformation. This study's findings suggest that blockchain technology possesses considerable potential to improve the quality of banking services (Lisdayanti, 2024). The primary features that render blockchain pertinent to the future of the financial sector are efficiency, security, transparency, and the reduction of operational expenses. With adequate legislative support and adoption, blockchain has the potential to serve as the primary foundation for a highly competitive and customer-centric digital banking system.

### ***The Impact of Digital Marketing on Customer Loyalty***

This research indicates that digital marketing directly influences client loyalty and engagement. Strategies including social media ads, interactive communications, and instructive information on digital platforms serve as essential instruments for cultivating enduring consumer relationships. Hasbullah and UMS's research indicates that digital marketing enhances brand engagement and influences the adoption of digital banking solutions, including mobile banking (Trisnaudy et al., 2024). This underscores the second purpose of the research, which is to examine how digital marketing may cultivate favorable opinions and improve consumer experiences with financial services. Digital marketing has emerged as a fundamental component of contemporary banking marketing tactics. In the face of intensifying competition and evolving consumer behavior, banks must proficiently engage customers via digital platforms, including social media, websites, email, and mobile applications. This method is employed not just to attract new clients but also to maintain existing ones by bolstering their loyalty to banking services.

Customer loyalty is a crucial metric for assessing the success of financial services, particularly in the digital age. Numerous literature reviews indicate that digital marketing significantly contributes to the establishment of emotional connections between banks and their clients. Regularly sharing educational, informative, and pertinent content on social media can foster profound and enduring engagement. Hasbullah's research indicates that customer loyalty markedly enhances when banks deliver a consistent and valuable digital experience (Pratama & Widarmanti, 2023). Digital marketing enables banks to engage directly and personally with clients via personalized email campaigns or push alerts aligned with user preferences. This establishes a reciprocal



relationship that amplifies the sense of being esteemed and acknowledged by the bank. Social media has emerged as a highly successful instrument for cultivating a digital banking community. Utilizing channels such as Instagram, Facebook, and Twitter, banks can facilitate interactive contact, broadcast current service information, and promptly address client inquiries or grievances. A prompt and precise reply on social media significantly enhances the formation of a favorable image and bolsters client trust (Andirwan, Asmita, Zhafran, Syaiful, & Beddu, 2023).

Digital marketing is highly effective in promoting and facilitating the adoption of digital banking services, including mobile banking, internet banking, and QR payments (Muninggar et al., 2024). The initiative to introduce new features via educational videos, tutorials, and user testimonials can enhance public comprehension and acceptance of the proposed service enhancements. The more accessible and comprehensible the service is for clients, the greater the probability that they will remain and persist in utilizing the same bank's services (Welta, 2018). A crucial aspect of digital marketing is the capacity to assess effectiveness in real-time. By utilizing metrics such as click-through rate (CTR), engagement rate, conversion rate, and return on investment (ROI), banks may assess each digital marketing campaign with greater precision and swiftly modify their tactics as needed. This adaptability guarantees that digital marketing strategies stay pertinent to the constantly evolving industry dynamics and consumer demands. Customized content significantly contributes to the augmentation of consumer loyalty. Banks that provide product offerings or information tailored to consumer behaviors and demands, informed by digital activity data, will more effectively cultivate loyalty (Muis, Fahmi, Prayogi, & Jufrizen, 2021). Techniques such as retargeting advertisements, personalized email marketing, and product suggestions derived on purchase history exemplify the application of digital marketing with an emphasis on personalization.

Furthermore, digital marketing facilitates the value exchange paradigm, a strategy that transcends just product sales by delivering genuine value to consumers. For instance, offering instructional material on money management, investing strategies, or digital transaction security. When consumers perceive that they are receiving added advantages from their engagements with the bank, a sense of attachment and loyalty will inherently develop. The efficacy of digital marketing in bolstering consumer loyalty is further reinforced by sustainability through continuous optimization. This indicates that digital plans are not static and finalized, but rather dynamic and perpetually refined depending on data and assessment. Each alteration in social media algorithms or customer behavior preferences provides the bank with a foundation to strategically revise its approach (Hutagalung, Murizal, Isnani, & Saragih, 2023).

The literature research conclusively demonstrates that digital marketing significantly contributes to client loyalty and is intrinsically linked to digital

transformation within the banking sector. Employing an effective plan, digital marketing fortifies the brand, amplifies engagement, and cultivates a gratifying and enduring consumer experience. Consequently, banks committed to enhancing their digital offerings must prioritize digital marketing as a fundamental component of customer relationship management

### ***The interplay between Blockchain and Digital Marketing***

SLR discovered that blockchain technology and digital marketing are mutually beneficial within the framework of integration. Blockchain establishes a secure, transparent, and reliable system for consumers, whereas digital marketing is tasked with broadly communicating and educating the public about these advantages. Zulhelmi's study highlights that the successful implementation of new technology in financial services is largely contingent upon the effective communication of its value to the public (Nugroho & Widiarti, 2022). These findings correspond with the third purpose of the research, which aims to ascertain the synergy between the two technologies in developing competitive and reliable digital banking services. In a progressively competitive digital landscape, technological advancements like blockchain and digital marketing techniques do not function independently; instead, they synergistically enhance the provision of cohesive and useful financial service experiences. Blockchain establishes a robust framework for digital infrastructure by ensuring security, transparency, and efficiency, whereas digital marketing is essential for communicating the benefits of this technology to customers, enhancing adoption, and reinforcing customer loyalty.

A primary advantage of blockchain is its dependability in preserving the security and integrity of transactional data. Each transaction documented in the blockchain network is permanent, immutable, and verifiable by all pertinent parties. Nonetheless, this technical value may not be readily comprehensible to average consumers. Digital marketing plays a crucial role in conveying the benefits of blockchain technology in a more accessible, engaging, and user-centric manner. Digital marketing can articulate the advantages of blockchain, including personal data protection, transaction transparency, and service efficiency, into compelling tales that persuade prospective users (Wibowo, 2023). Social media advertisements or promotional movies can illustrate simulations of blockchain-based banking services that streamline transactions, mitigate identity theft risk, and accelerate the credit approval process. This method facilitates the public's acceptance of sophisticated technologies. In addition to communication, this synergy is also manifested in the enhancement of trust. Blockchain establishes trust through a decentralized system devoid of intermediaries, whereas digital marketing cultivates trust via brand voice, customer testimonials, and user experiences showcased across several digital platforms. The amalgamation of

technical and emotional trust establishes a robust foundation for consumer loyalty in digital banking services.

This collaboration also facilitates the rapid uptake of technology. A significant number of customers hesitate to adopt new services due to a lack of knowledge or apprehensions regarding security issues. Indeed, blockchain is specifically engineered to mitigate those dangers. A comprehensive and compelling digital marketing plan helps mitigate these psychological hurdles. By presenting interactive information like infographics, webinars, or instructive pieces, banks can inform the public while also advertising their services. This combination is crucial to establishing brand uniqueness. In the crowded landscape of digital financial services, institutions that emphasize the integration of blockchain as a value-added feature will secure a more advantageous market position. Through an effective digital marketing strategy, this advantage may be conveyed as the bank's dedication to transparency and consumer security—two principles that have significant importance in the digital financial age.

This synergy promotes banks to develop value-oriented services. Mobile banking services utilizing blockchain for login security and transaction authentication can be marketed through digital advertising emphasizing security as the primary attribute. This not only improves public perception of the product but also delivers both functional and emotional value concurrently. The collaboration between blockchain and digital marketing fosters the creation of a sustainable digital ecosystem. Blockchain facilitates the amalgamation of diverse services, such as a reward system utilizing digital tokens, whilst digital marketing enhances community management and fosters user loyalty within the ecosystem. This method transforms banks from mere service providers into managers of an active and engaged digital customer community.

Optimal functioning of this synergy necessitates cooperation between the technical team and the marketing team within the banking organization. The technology team is accountable for maintaining the stability and security of the blockchain system, whilst the marketing team is responsible for effectively and creatively communicating the technology's values to the market. When both teams collaborate towards a unified goal, digital transformation can advance fully and strategically. In conclusion, the integration of blockchain and digital marketing facilitates banks in delivering rapid, safe, and efficient services while also fostering memorable, reliable, and personalized client experiences. Ultimately, this amalgamation will yield a competitive edge that dictates the success of banks in navigating the increasingly intricate and dynamic landscape of financial digitization.

### ***Consequences for Service and Customer Contentment***

The amalgamation of blockchain technology and digital marketing methods has substantial ramifications for enhancing customer service quality. Blockchain

guarantees that the transaction process is secure, transparent, and efficient. Conversely, digital marketing functions as a method to directly engage clients and cultivate more personal relationships via many digital platforms. The collaboration between the two yields services that are robust in infrastructure and exceptional in consumer communication and interaction. Speed and accessibility are the two primary elements directly encountered by customers utilizing financial services that have included digital technology. The blockchain technology facilitates rapid transactions, including fund transfers, identification verification, and account openings, with little party participation (Imelda Bandaso, Trinita, Randa, Mongan, & Faradilla, 2022). The procedure that formerly required several days can now be accomplished in only minutes. This efficiency engenders a favorable impression among consumers and enhances their contentment with the bank's services (Hutagalung et al., 2024).

Security is a significant concern for customers. In a digital environment susceptible to data theft and fraud, blockchain offers security as transactions are encrypted, validated by many nodes, and resistant to manipulation. When customers are aware that their data is safeguarded by an advanced system, their faith in the bank will augment. This sense of security is a crucial component in fostering enduring devotion. Nevertheless, technology by itself is insufficient. To enhance client comprehension of complex systems such as blockchain, banks require focused digital marketing tactics. By utilizing digital education methods such as video lessons, infographics, blog articles, and webinars, banks can facilitate a clear comprehension of the system's functionality and its advantages for consumers. This method closes the knowledge gap and guarantees that technology is both utilized and comprehended by its consumers.

In this instance, digital marketing facilitates a more personalized and participatory customer experience. By analyzing user activity data in mobile banking applications, banks can deliver product offers that align with their clients' demands. The blockchain-based solution guarantees the secure utilization of personal data, preventing misuse. This amalgamation yields services that are both pertinent and reliable. The research conducted by Al-Ghifari & Khusnudin (2022), identifies security and trust as the primary determinants of customer loyalty (Islamiyah, 2022). Expeditious service is insufficient without accompanying security assurances. Blockchain offers a technological advantage, while digital marketing enhances the emotional connection between clients and organizations. Customers are not only content due to the expediency of the service, but also experience tranquility and appreciation because they obtain sufficient protection.

Another implication pertains to customer empowerment. Digital technology enables users to freely access and manage their funds without visiting a branch office. Simultaneously, digital marketing tactics like push notifications and email reminders assist customers in being informed about the latest developments and pertinent financial education. Proactive services foster a more engaged

relationship between the bank and its clientele. A favorable experience with digital services can foster client advocacy, wherein customers exhibit loyalty and actively suggest the bank's services to others. Digital marketing significantly facilitates this advocacy through testimonial content, referral programs, and social media campaigns that encourage voluntary client participation.

Furthermore, blockchain-based services create novel prospects for product innovation, like digital loyalty tokens, smart contracts for automated loans, and investment portfolios based on digital assets. All these breakthroughs necessitate excellent communication and promotion to be adequately received and utilized by clients. Digital marketing offers a versatile approach to disseminate these breakthroughs broadly and effectively. The integration of blockchain and digital marketing significantly enhances customer service with extensive positive ramifications. It not only improves productivity and security but also fortifies trust, loyalty, and enduring relationships with clients (Vania et al., 2025). In the context of intensifying banking competition, this synergy is essential for developing adaptable, pertinent, and highly competitive services in the digital age.

#### **4. CONCLUSION**

This study demonstrates that the amalgamation of blockchain technology and digital marketing significantly enhances the quality of banking services in the digital age. Blockchain significantly enhances the efficiency, transparency, and security of transaction systems, while digital marketing effectively facilitates communication to foster customer involvement, trust, and loyalty. The amalgamation of these two parts not only improves the technical and operational facets of services but also fortifies the reputation of banking institutions among consumers.

This research employed the Systematic Literature Review (SLR) technique to effectively delineate diverse academic insights regarding the influence of blockchain and digital marketing on the evolution of banking services. The study findings demonstrate that the implementation of blockchain technology expedites service operations and improves consumer data security, whilst digital marketing facilitates the adoption of new technologies via instructional and persuasive communication tactics.

Consequently, the amalgamation of both may emerge as a pivotal strategy for banks in adapting to shifts in digital consumer behavior, bolstering competitiveness, and establishing a sustainable and responsive financial services ecosystem in accordance with contemporary demands. This research establishes a robust theoretical framework for the advancement of adaptive banking service innovations and serves as a practical reference for the financial industry and regulators in facilitating digital transformation within the banking sector.

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