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Analysis of Data Security and Privacy on Tiktok Social Media Applications Based on Blockchin Technology

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ABSTRACT

This journal discusses data security and privacy analysis on TikTok's social media application with the application of blockchain technology. Data security and user privacy are a major concern in today's digital age, especially in the context of popular social media applications like TikTok. Using blockchain technology, the study aims to explore the potential for improved data security and privacy for TikToks users. The research methodology involves in-depth analysis of existing data security systems and the implementation of blockchain technology in the framework of its applications. The practical implications of these findings are discussed in the context of the protection of the personal data of users of social media applications. This research has made an important contribution to understanding the importance of data security and privacy in social media applications as well as the potential of blockchain technology as an effective solution..

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1. INTRODUCTION

In the growing digital age, user data security and privacy are becoming an increasingly important issue, especially in the context of popular social media applications such as TikTok. The importance of protecting users' personal data andining their privacy is a major focus in today's information technology development. In this context, blockchain technology has emerged as a potential solution

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to enhance data security and privacy in a variety of applications, including social media applications such as TikTok. The introduction aims to provide a background on data security and privacy issues in social media applications, especially TikTok, as well as to explain the basic concepts of blockchain technology and its potential for improving data security. By understanding the challenges faced in protecting TikToks users' data and the potential of blockchain technologies as a solution, the research is aimed at conducting in-depth analysis of the implementation of Blockchain technology in improving the data safety and privacy of TikTos users. These steps provide a foundation for further exploration of data security and privacy analysis on TikTok's blockchain-based technology in an effort to improve user data protection and ensure a secure and trusted user experience.

2. RESEARCH METHOD

The research uses a comprehensive analytical approach to evaluate data security and privacy on the TikTok social media application with the application of blockchain technology. The following is an explanation of the approach used in this study:

1. Data collection: - Data used in the study consists of information related to data security and privacy on TikTok, as well as blockchain technology concepts relevant to implementation in social media applications.
2. Data Security Analysis: - Proceeded in-depth analysis of the data security system existing on TikTook, including identification of potential vulnerabilities and security threats that may occur. - Evaluation of privacy policies implemented by TikToks to protect user data.
3. Implementation of Blockchain Technology: - Study of the basic concepts of blockchain technology and how it is implemented in improving data security and privacy on TikTok. - Identify the blockchain features that can be used to strengthen the data security system of TikToc.
4. Data security testing with Blockchain technology: - Simulation of data security testing by using blockchain technology to see to what extent improvements in security can be achieved. - Evaluation of test results and comparison with conventional data security systems of TikTok.
5. Result Analysis: - Analysis of the results of TikTok data security and privacy testing with blockchain technology to evaluate the effectiveness of the application of such technology. - Discussion of key findings and practical implications of the use of blockchain technology in improving the security of data and privacy of users of Tiktok.

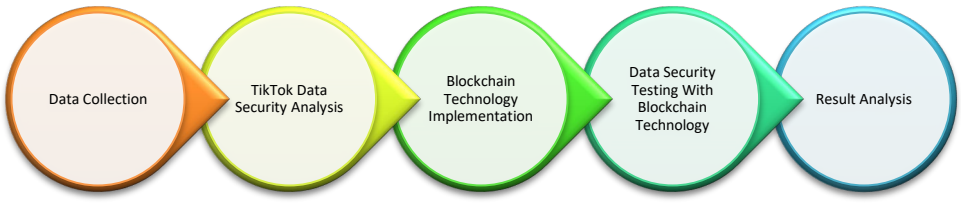

Fig 1. Research methode

3. RES ULTS AND DISCUSSIONS

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Result:

1. TikTok Data Security: - Identification of potential vulnerabilities in the data security system, including the risk of phishing attacks and theft of user data. - Assessment of TikToks privacy policy and finding that improvements are needed in the protection of user personal data.
2. Implementation of Blockchain Technology: - Application of blockchain technology in enhancing TikTok data security, including the use of smart contracts to validate transactions and end-to-end encryption to protect user data. - Identification of blockchain features that can strengthen TikToks data security system, such as decentralization and transparency.
3. Data Security Testing with Blockchain Technology: Simulation of TikTok data security testing with blockchain technology to see effectiveness in detecting and preventing cyber attacks..

Discourse:

1. Data security and privacy:- Discussions about finding potential vulnerabilities in TikTok data security and their implications for user privacy. - The importance of improved privacy policies and stronger data protection measures in social media applications.
2. Blockchain Technology Benefits: - Discussions on the benefits of blockchain technology in improving data security and privacy of TikTok users. - The potential of Blockchain technology in creating a safer, transparent, and trustworthy digital environment.
3. Practical Implications: - Practical implications of key findings related to data security and privacy on TikTok with blockchain technology. - Recommendations for the implementation of blockchain technology in other social media applications to improve user data security.

Deep Analysis: Application of Research Results:

1. Enhanced Data Security and Privacy: - Implementation of blockchain technology in social media applications like TikTok can improve user data security with features such as end-to-end encryption, decentralization, and transaction validation through smart contracts. - Research findings can be applied to strengthen data security and privacy systems on other social media platforms, thereby providing better protection for users.
2. Early Detection of Security Threats: - TikTok data security testing with blockchain technology can help in early detection of potential cyber attacks such as phishing, data theft, and information manipulation.

   The results of the research can be used to develop early detection systems that are more effective in protecting user data from rising security threats.Relevance in the context of Data Security and Privacy:

1. User Data Protection: - This study has high relevance in data security and privacy because it focuses on efforts to improve the protection of user data in social media applications. - The findings of the research can provide guidance for technology companies to strengthen their privacy policies and data security systems in order to protect user sensitive information.
2. Compliance with Privacy Regulations: - With increasingly strict data privacy regulations like GDPR and CCPA, the application of these research results can help technology companies comply with data security standards set by regulatory authorities. - Implementation of blockchain technology can be a solution to meet stricter privacy compliance requirements and increase user confidence in their data protection.

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3. Increased Data Security Awareness: - This research can also contribute to raising user awareness about the importance of data security and privacy in the use of social media applications

4. CONCLUSION

Key findings:

1. Identification of Data Security Vulnerabilities of TikTok: - Research findings identify potential vulnerabilities in the data security system of tikTok, including the risk of phishing attacks, data theft, and user privacy violations.
2. Implementation of Blockchain Technology to Improve Data Security: - Application of blockchain technology in TikTok can enhance user data security through features such as end-to-end encryption, validation of transactions with smart contracts, and data decentralization. - The security potential offered by blockchain technology can strengthen the data security system of tikTok and protect user sensitive information.

Conclusion:

1. The importance of improved data security and privacy: - An analysis of data and privacy security on TikTok highlights the importance to enhance security measures to protect user data from rising cyber threats. - Implementation of blockchain technology can be an effective solution in improving user data safety and privacy in social media applications.
2. Relevance of Blockchain Technology in Data Security Context: - Blockchain technology offers great potential in strengthening the data security and privacy of TikTok users with features such as high transparency, reliability, and security. - Application of blockchain technology in social media applications can provide better protection for user data and build confidence in the use of digital platforms.

ACKNOWLEDGEMENTS

Advice for Further Development:

1. Advanced research: - Conducting advanced research to deepen the implementation of blockchain technology in enhancing data security and privacy on social media platforms other than TikTok. - Investigating the potential of integrating blockchain technology with artificial intelligence (AI) for early detection of security threats and improving data security proactively.
2. Collaboration between industry and academia: - Encourage collaboration between the technology industry and academic institutions to develop innovative and effective data security standards. - Hold joint workshops and seminars to share knowledge and experience in the application of blockchain technology in the context of data security and privacy.
3. Development of Data Security Tools: - Develop data security tools integrated with blockchain technology to make it easier for users to protect their personal information more effectively. - Design a data security testing platform that can help technology companies identify and address security vulnerabilities quickly.
4. User education and awareness: - Educate users about the importance of data security and privacy in the use of social media applications, as well as provide practical guidance on the

safeguards that can be taken. - Encourage user Awareness about the benefits of blockchain technology in protecting personal data and building confidence in sharing information online.

5. Consultation with Data Security Experts: - Involve data security and privacy experts in the process of developing blockchain technology to ensure proper and effective implementation. - Get input from data security experts in designing comprehensive and adaptive security strategies to evolving security threats.

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