BLOCKCHAIN-BASED CRIMINAL EVIDENCE DATA MANAGEMENT SYSTEM

Supervisor (1 person)

Fattahur Rohim

Study Program of Informatics Engineering

Majoring in Information Technology

Program studi Teknik Informatika

Jurusan Teknologi Informasi

Abstract

Evidence management in police institutions has an important role in maintaining the integrity of the legal process. However, in practice, there are still many recording systems that are carried out manually and are prone to errors, data loss, and even abuse of authority. This research aims to design and develop a criminal evidence management system based on blockchain technology, specifically using the Hyperledger Fabric platform as a private blockchain implementation. This system is designed to record all evidence activities from receipt, storage, examination, to release in the form of digital transactions that cannot be modified (immutable).

With this approach, any changes in the status of evidence can be traced transparently and in real-time. The system development method used is prototyping, with the stages of field observations, interviews, and literature studies. The results showed that the system built can improve security, accountability, and efficiency in the management of evidence, as well as facilitate the process of auditing and internal supervision in the police environment.

Keywords: Blockchain, Evidence, Hyperledger Fabric, Police, Information System, Private Blockchain