IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

per 2025 Impact Factor: 7.67

Volume 5, Issue 3, November 2025

Digital Tokenization For Loans In Banking Integrating NPL

Mrs. Srushti Mhaske¹, Mrs. Ashwini Mohite², Mr. Prathmesh Nakhate³, Mr. Habibsaeed Mukebil⁴ Dr. Pravin Latane⁵

Students, Department of Computer Engineering¹⁻⁴
Professor of Computer Engineering⁵
Dr. D. Y. Patil College of Engineering and Innovation, Varale, Pune, Maharashtra, India

Abstract: This project introduces a decentralized application to tackle the main problems of opacity and inefficiency in managing Non-Performing Loans (NPLs). It uses a smart contract on the Ethereum blockchain to create a secure, unchangeable, and clear ledger that covers the entire loan lifecycle. The system has a role-based structure that separates public loan applicants from authorized bank employees. The proof-of-concept shows how blockchain technology improves data integrity, simplifies auditing, and builds more trust and efficiency in the financial ecosystem. The system ensures secure loan status updates and clear access control. It aims to improve regulatory oversight and operational efficiency in banking loan management.

Keywords: Ethereum Blockchain, Smart Contracts, Meta- Mask Wallet





