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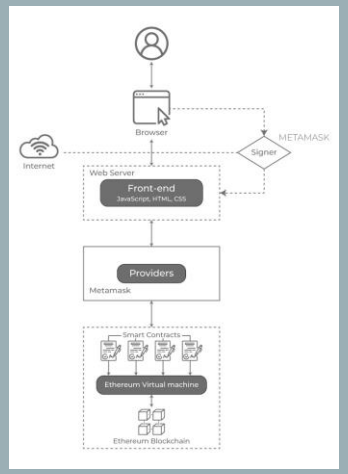
Abstract

- Blockchain-based cryptocurrencies show how all currency-based centralized systems can be securely implemented in a decentralized way.
- Current baking organizations are not fully automated, as transactions are performed by humans at several stages.
- We propose a new banking system based on Ethereum blockchain technology that is automated and eliminates authoritarian interception. We also develop smart contracts that control the procedures of the system, and transaction details are stored in blocks.

System Architecture



Literature Survey

Title	Author	Abstract
Overview of Blockchain Implementation on Islamic Finance: Saadiqin Experience	Alidin, A. A., Ali-Wosabi, A. A. A., & Yusoff, Z.	This white paper discusses current issues related to financial services, especially Islamic finance, the benefits of blockchain implementation in financial services, and the potential for Saadiqin and blockchain integration.
Decentralized finance and cryptocurrency activity in Africa	Ozili PK	This paper contains a discussion of decentralized finance in Africa. Contains statistics and data on decentralized finance in Africa.
RBI Distributed Ledger Technology and Blockchain - A Future of Decentralized India	Bhuvana R, Aithal PS	Cryptocurrencies have the ability to boost central bank payments and operations, acting as a forum for central banks to launch their own digital currencies. As a research case study, we examined distributed ledger technology, various central bank distributed ledger projects, and blockchain technology in the Indian market.
KyberNetwork : A trustless decentralized exchange and payment service	Luu, Loi and Velner, Yaron	In this paper, we design and build KyberNetwork. An on-chain protocol that enables instant exchange and conversion of digital assets.
Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets	Schär F	DeFi uses smart contracts to create protocols that replicate existing financial services in a more open, interoperable, and transparent way. We propose a layered framework for analyzing the implicit architecture and various DeFi building blocks, including token standards, decentralized exchanges, and on-chain wealth management protocols.
Improving the Process of Lending, Monitoring and Evaluating Through Blockchain Technologies: An Application of Blockchain in the Brazilian Development Bank (BNDES)	Arantes, G. M., D'Almeida, J. N., Onodera, M. T., Moreno, S. M. D. B. M., & Almeida, V. D. R. S.	This white paper describes what can be done as part of the migration process and outlines what has already been done. The proposal will increase the simplify manual operations, reduce operational costs, and provide data to support a comprehensive analysis of bank lending benefits.

Objectives

- Autonomous, accessible, secure and transparent financial transactions
- Peer-to-peer financial transactions

Proposed Solution

- Decentralized Finance or DeFi solutions is a low-cost, fast, efficient, trustworthy and completely transparent global financial system based on public blockchains which operate without any central authority and is highly accessible through the internet. Currently, the entire traditional finance industry is centralized.
- DeFi is to challenge the use of centralized financial institutions and third parties that are involved in all financial transactions.

Conclusion

- We think the Blockchain technology as a catalyst for emerging use cases in the financial and non-financial industries.
- Blockchain can play a pivotal role in transforming the digitalization of industries and applications by enabling secure trust frameworks, creating agile value chain production, and tighter integration with technologies.
- We feel banking is one of the many examples that demonstrate the transformative capability of blockchain.