



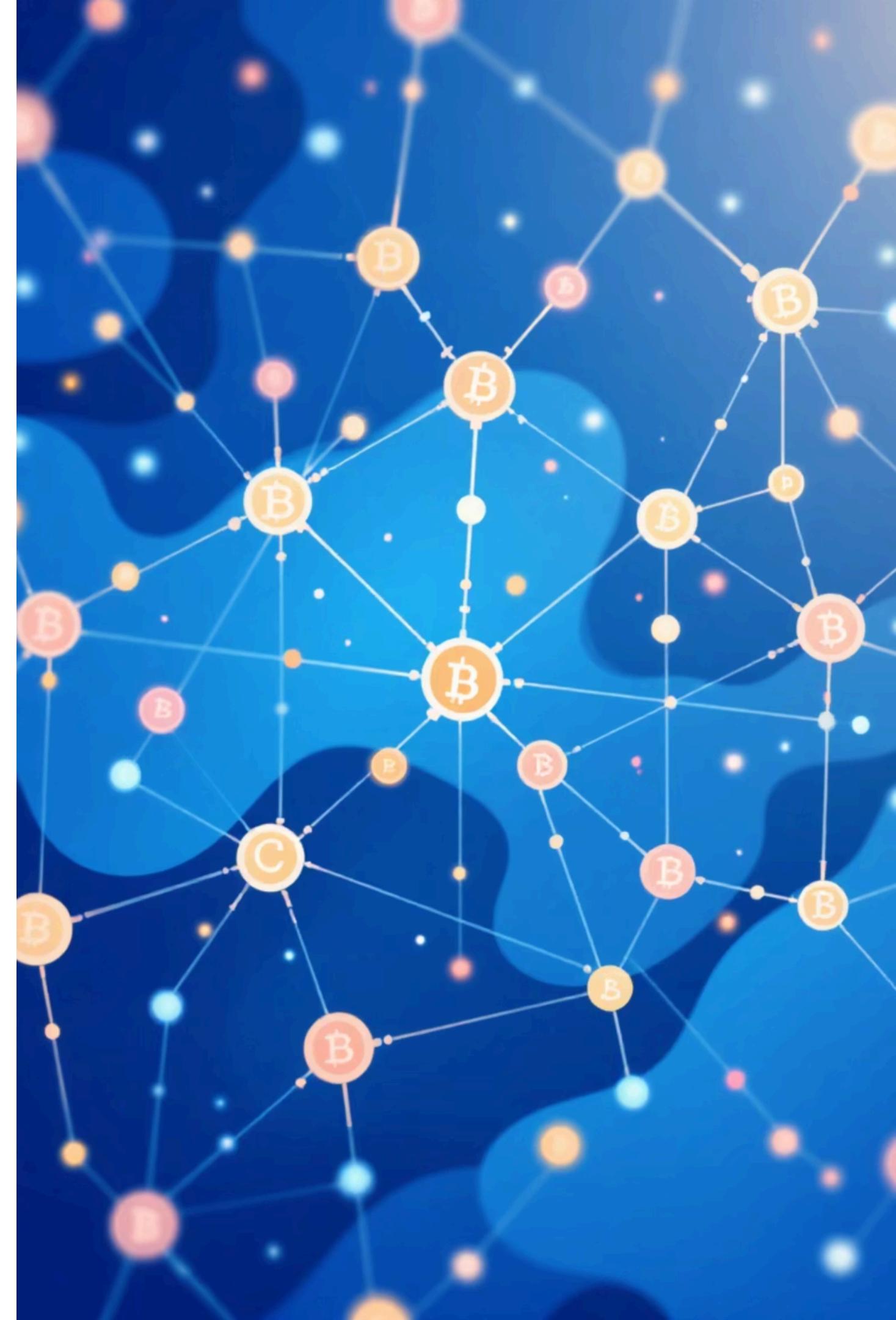
DECENTRALIZED CROWDFUNDING PLATFORM USING BLOCKCHAIN & SMART CONTRACTS

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The Evolution of Crowdfunding



Traditional Fundraising

Banks, venture capital, limited accessibility

Centralized Platforms

Kickstarter, Indiegogo, high fees, geographic limits

Decentralized Future

Blockchain-powered, transparent, global reach

Blockchain technology addresses fundamental trust and accessibility issues in traditional crowdfunding models, enabling truly decentralized fundraising ecosystems.

Research Foundation

Key Academic Insights

- **Mollick (2014)**: Platform dynamics and success factors in crowdfunding campaigns
- **Belleflamme (2014)**: Economic models of reward-based crowdfunding mechanisms
- **Christidis & Devetsikiotis (2016)**: IoT and blockchain integration for decentralized systems
- **Tapscott (2016)**: Blockchain revolution and trust in digital economies

 Smart contracts eliminate intermediaries while maintaining security and transparency through immutable blockchain records.



Our research builds upon established crowdfunding theory while addressing the critical gaps identified in centralized platform models.

Why Blockchain Transforms Crowdfunding



Transparency

Every transaction recorded on immutable public ledger, eliminating hidden fees and enabling real-time tracking



Smart Contract Automation

Automated fund release based on predefined conditions, removing human bias and delays



Global Accessibility

Borderless participation without geographic restrictions or traditional banking requirements



Reduced Costs

Eliminate platform fees (typically 5-8%) through direct peer-to-peer interactions

Critical Problems in Current Systems

Platform Fee Burden

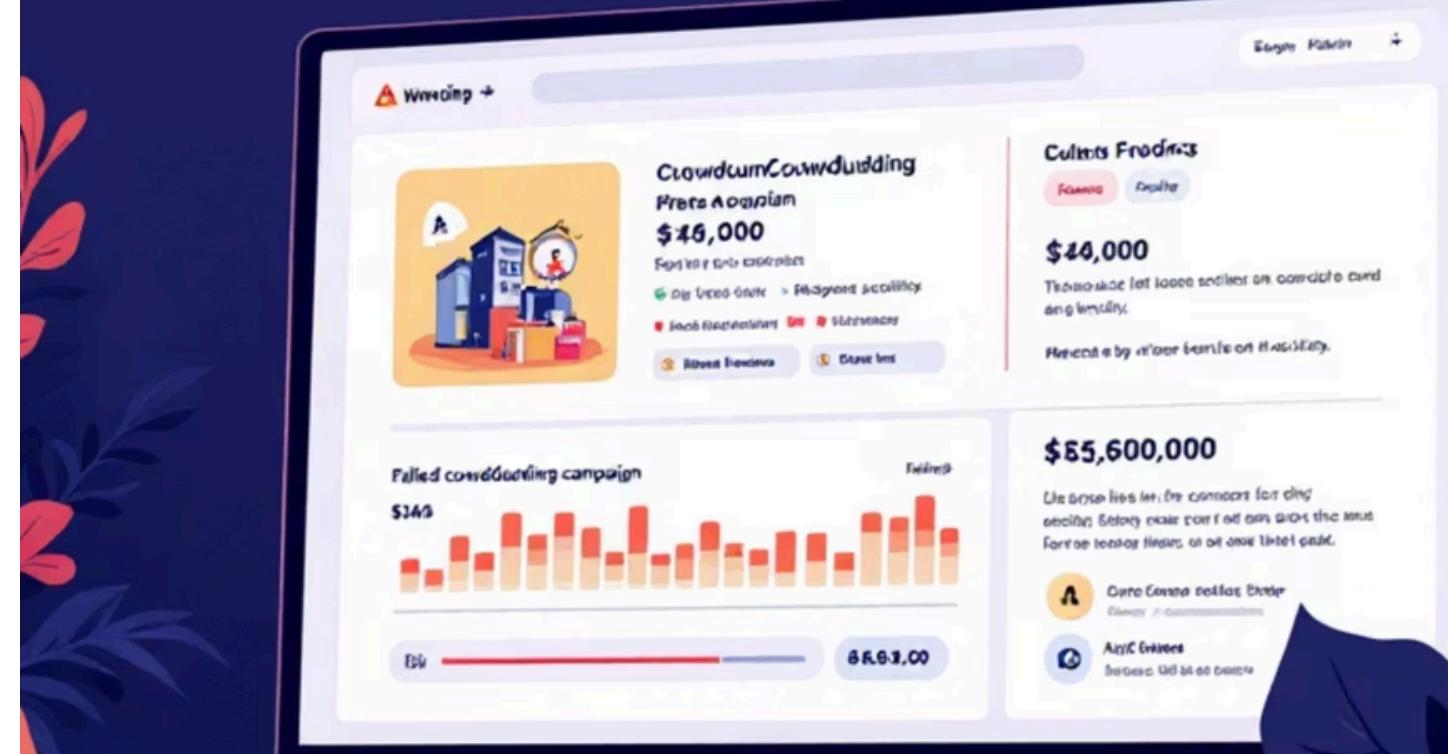
Kickstarter charges 5% + payment processing fees, significantly reducing funds available to creators

High-Profile Fraud Cases

Kobe Red: \$120K raised, no delivery. **Coolest Cooler:** \$13M raised, partial fulfillment after years of delays

Operational Barriers

Geographic restrictions, delayed disbursements, content censorship, and lack of transparency in fund management



Problem Statement

Current crowdfunding platforms (Kickstarter, Indiegogo, GoFundMe) suffer from:

- High Fees (up to 10% of funds raised)
- Fraud & Failed Campaigns (contributors lose money without recourse)
- Lack of Transparency in fund utilization
- Geographic Restrictions (limited countries supported)
- Delayed Disbursements (14–30 days after completion)
- Censorship & Control by centralized authorities



Project Objectives & Technical Goals

01

Secure Smart Contract Development

Implement robust Solidity contracts with comprehensive security auditing using MythX and Slither

02

Web3-Enabled Frontend

Build responsive React.js interface integrated with Web3.js for seamless blockchain interaction

03

Transparency & Auditability

Ensure all transactions and campaign progress are publicly verifiable on the blockchain

04

Cost Reduction

Eliminate intermediaries and reduce transaction costs to minimal gas fees

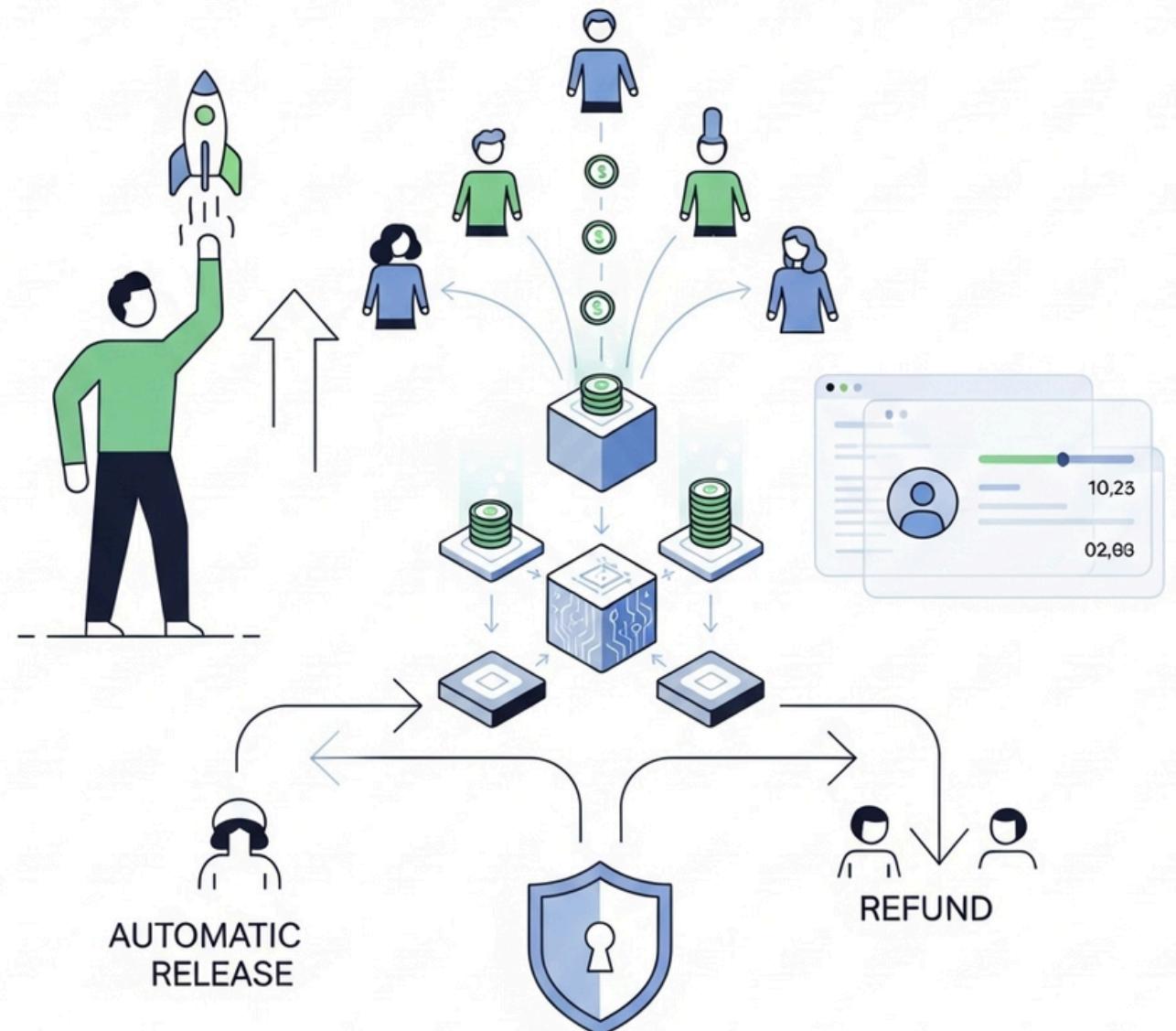
05

Future-Ready Architecture

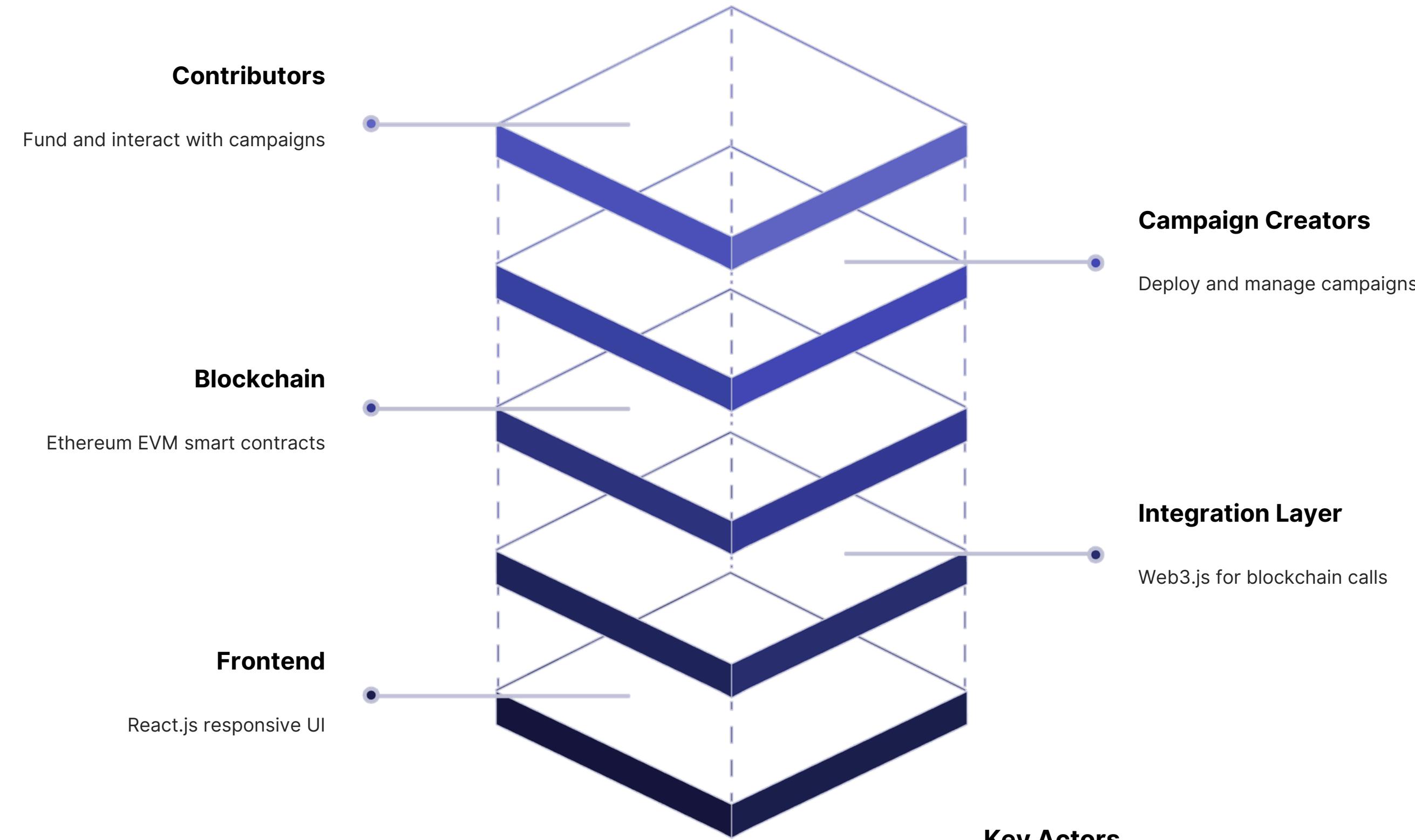
Design system compatible with DAO governance mechanisms and NFT reward systems

Modules of the System

- **Campaign Creation Module** – Launch campaigns with goals, deadlines, and details.
- **Contribution Management Module** – Manage contributions, verify transactions.
- **Fund Release Module** – Automatically disburse funds on successful campaigns.
- **Refund Module** – Refund contributors if campaign fails.
- **UI Module** – Simple frontend for user interaction with Web3.



System Architecture Overview



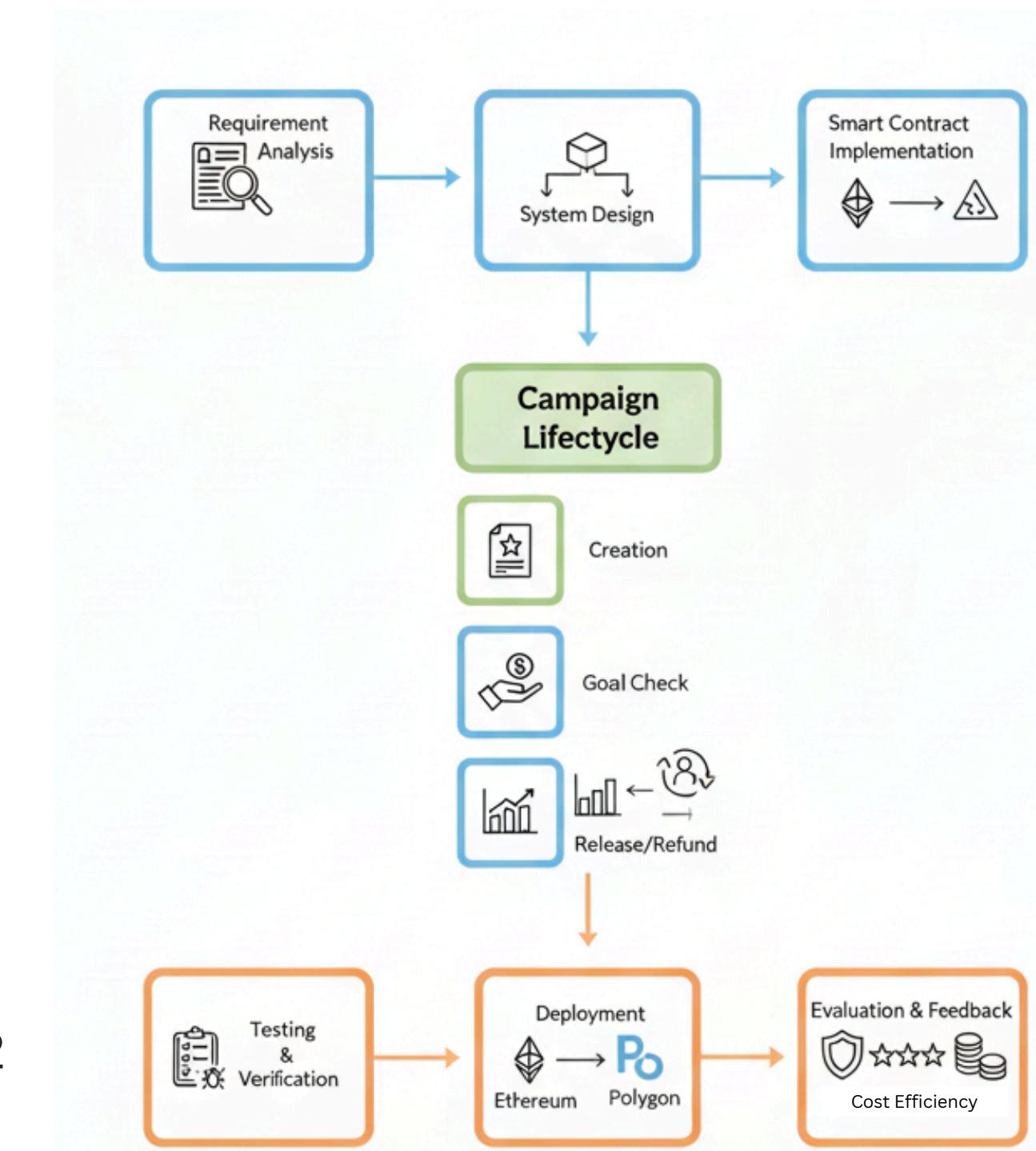
Technology Stack

- **Frontend:** React.js with responsive design

- **Campaign Creators:** Deploy smart contracts, set funding goals

Proposed Methodology

- **Requirement Analysis** – Study existing crowdfunding issues & blockchain feasibility.
- **System Design** – Define architecture (Frontend, Web3.js integration, Blockchain).
- **Smart Contract Implementation** – Solidity contracts for campaign lifecycle (creation, contribution, release/refund).
- **Campaign Lifecycle Flow** – Define contribution phase, goal check, fund release or refund.
- **Testing & Verification** – Unit, integration, security, and user acceptance testing.
- **Deployment** – Test on Ethereum testnets → Deploy on Layer-2 (Polygon) for efficiency.
- **Evaluation & Feedback** – Check transparency, security, usability, and cost efficiency.





Campaign Lifecycle Flow

Campaign Creation

Creator deploys smart contract with funding goal, timeline, and reward structure

Goal Assessment

Smart contract automatically checks if funding goal is reached by deadline



Contribution Phase

Contributors send cryptocurrency directly to smart contract address

Fund Distribution

Successful: funds released to creator. Failed: automatic refunds to contributors

Real-World Applications



Startup Ventures

Entrepreneurs can raise capital globally without traditional venture capital barriers or extensive documentation requirements



Social Causes

NGOs and humanitarian projects benefit from transparent fund tracking and global accessibility



Medical Emergencies

Urgent healthcare fundraising with immediate, transparent fund disbursement when goals are met



Open Source Projects

Developers can fund software development with contributor governance through DAO mechanisms

Impact & Future Vision

Key Advantages



Transparency Revolution

Complete visibility into fund usage and campaign progress



Global Financial Inclusion

Access to funding regardless of geographic location or banking status



Automated Trust

Smart contracts eliminate need for intermediary trust relationships

"Blockchain technology creates a trustless, transparent, and borderless ecosystem for crowdfunding, democratizing access to capital worldwide."



Enhanced Security & Trust Mechanisms

Our platform integrates multiple layers of security to protect both creators and contributors, ensuring a trustworthy environment for all transactions.



Smart Contract Audits

Regular, independent security audits of all smart contracts by third-party experts to identify and mitigate vulnerabilities before deployment.



Decentralized Custody

Funds are held directly in the smart contract, not a central entity, eliminating single points of failure and reducing counterparty risk.



Immutable Records

All campaign data and transaction history are permanently recorded on the blockchain, ensuring transparency and preventing manipulation.



Automated Escrow

Funds are released only upon successful campaign completion or automatically refunded if goals are not met, enforced by smart contract logic.

Shape the Future of Funding

Our blockchain-based crowdfunding platform is poised to revolutionize how projects are funded, offering unparalleled transparency, security, and global accessibility. Join us in building a new ecosystem where innovation thrives and trust is inherent.



THANK YOU