Inka's Paper

INKA

Decentralized multi-chain investment wallet

1. Introduction

Decentralized Finance (DeFi) is an ecosystem of decentralized blockchain applications that provide financial services without a centralized governing organization. For example, a financial institution is responsible for the safety and security of its clients' money and makes transfers between banks, organizations or people. In the DeFi ecosystem, protocols and smart contracts are responsible for the security and transfer of transactions.

Such applications consist of a set of products and services that replace financial institutions, insurance companies, the stock market and other services of financial institutions. Due to the compatibility of DeFi applications, users can combine different services using one decentralized wallet. Key features: deposits, stablecoins, lending and borrowing, exchanges (DEX), cryptoasset management, derivatives, balanced investment portfolio, insurance, etc.

DeFi ecosystem based on *Ethereum, Binance Smart Chain, Polkadot, Solana, Stellar , Tron* and other chains separately according to every chain.

2. Features

The DeFi ecosystem consists of the following categories:

Stablecoins - act as a reliable store of value for DeFi platforms;

decentralized lending - platforms in which a user can take out a loan by providing over-collateral;

Decentralized exchanges and exchangers - allow you to trade assets directly from your wallets and earn money by providing liquidity to trading pairs;

DeFi investment platforms for issuing tokens - help to attract investment in projects;

Derivatives - tokens, the value of which depends on the value of real assets;

Insurance - allows you to insure your funds against errors in the code of smart contracts or hacking;

Payment services -allow you to make instant payments with cryptocurrencies.

3. Volume of decentralized finance services and cryptocurrencies

According to statistics of defipulse.com in May 2021, crypto assets in De Fi services were locked more than $ 70 billion.

The daily global turnover of cryptocurrencies already exceeds $ 2 billion and this trend will continue in future.

These trends are growing rapidly and more users want to have access for the best decentralized services to have a stable revenue from investing.

4. About Product

Inka is a unique Global multi chain wallet, that will unite *Ethereum, Binance Smart Chain, Polkadot, Solana, Stellar , Tron* and other chains in one decentralized wallet, and provides all services on these networks. *Inka* generates income from investments placed in the decentralized services from the largest ecosystems in the blockchain network.

Using just multi chain wallet *Inka*, the *Inka* users get access to all financial transactions that are carried out in networks at the same time, according to the principle of one aggregator, allowing them to exchange stable coins and the best cryptocurrencies, make money on financial transactions of the best decentralized services, receive profitability from all services of networks simultaneously.

Inka is constantly expanding its functionality, using tools for cross-chain lending, derivatives, exchange, balanced investment indices, ETF indices, a scoring system, which allows you to create one of the best ecosystems in the world for decentralized finance.

Inka has a high level of security, economic models of services are open for verification and international audit, which inspire confidence of users: they can be verified by any user or auditor without restriction.

5. Problem

Before creating the *Inka*, the core team had been working with international clients, for whom we developed products from scratch, connected with decentralized finance, storage, meaning the team is very familiar with the decentralized finance ecosystem.

We grasped that the same problems would always surface whenever it came to decentralized finance ecosystem.

These problems include:

- Ability to use only services and cryptocurrencies of one chain

- Inconvenience during exchanging cryptocurrencies from different blockchain networks

- The need to create accounts for each network

- Complex exchange and financial transactions for the transition from one chain to another

6. Solution

Inka aggregates chains under one application, and allows for exchange, investments, financial activities, ETF indices, balanced investment portfolio, analytics from all of these different platforms through a multi chain wallet.
Users can create only one account and use all cryptocurrencies and decentralized services from chains in one ecosystem of *Inka*.

Inka is not only a single ecosystem, but also a full-fledged functionality for creating a digital bank in decentralized finance system

7. Cases

Inka has use cases, especially in the cryptocurrency and DeFi ecosystem:

Multi chain projects

Inka can provide the client's dApp with a ERC 20, BEP 20, Erc20, Erc721, Erc1155, Trc20,Bep2, Bep20, OMNI, Stellar, Solana, based "all-in-one" experience for unified DeFi services and cryptocurrencies.

Defi and DEX Services

Inka can provide any DeFi service based on multi chains, such as Compound, Liquid swap, Polkaswap, Venus, Syntetify,Curve,Set,Bakeryswap and etc. Most of these services are frequently used worldwide, giving an opportunity to choose the best interest rate to invest.

NFT Marketplaces

Users can consider *Inka* as a platform for any NFT marketplace to buy any pictures they want.

8. *Inka*'s Road Map

Q1-Q2 2021

1. Development of decentralized wallets
2. DEFI staking (Ethereum)
3. Liquid pool (Ethereum)
4. DEX (Ethereum, Binance Smart Chain)

Q3-Q4 2021

1. Expansion of networks and services for cross-chain exchange
2. Expansion of De Fi services (Ethereum, Binance Smart Chain, Polkadot, Solana, Tron,Stellar)

Q1-Q2 2022

1. Tokenized ETF indexes
2. Automatic cross-chain exchange between blockchain networks and De Fi services
3. Cloud mining (Etherium, Bitcoin)
4. Adding the Multisig function to the wallet
5. Trust management (algorithmic trading, rebalancing)
6. Transaction analytics of all chains

Q3-Q4 2022

1. Digital bank
2. Integration with DeFi services (lending, currency exchange, NFT buying and selling services)
3. Access to DEX exchanges (multi chains)
4. Tokenized IPO

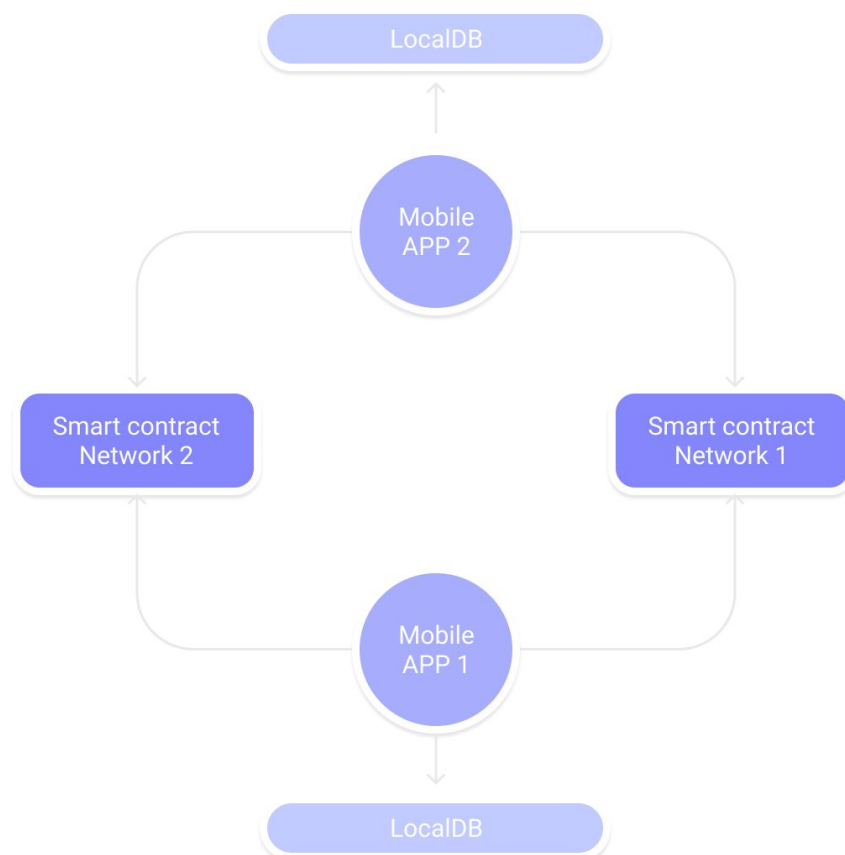# 9. Inka's functionality schematically
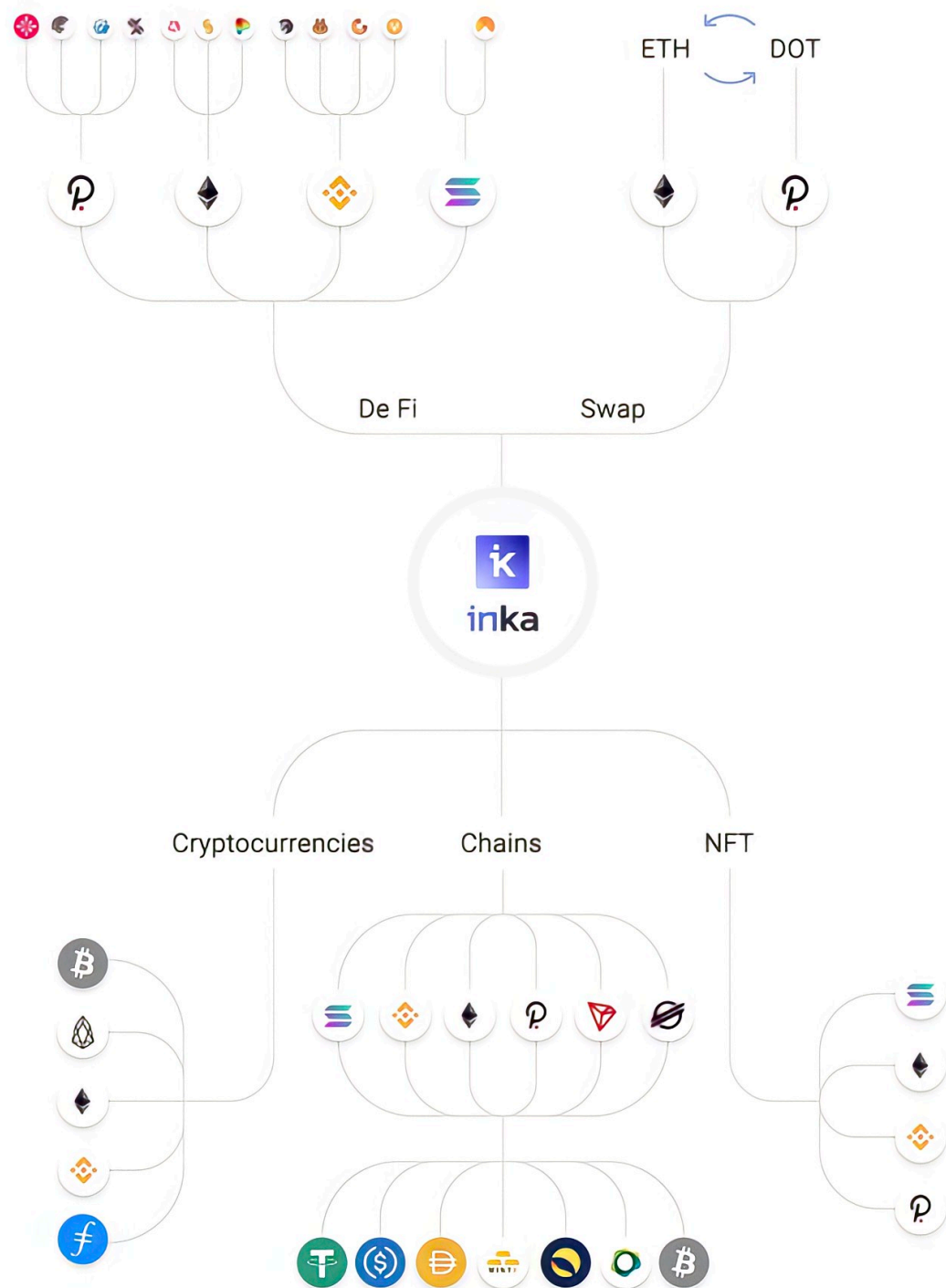
10. Technology of *Inka*

The scheme of exchanging one cryptocurrency for another will take place thanks to smart contracts and event tracking via web sockets.

Steps to create an order:
1. The first user freezes funds creates a buy or sell order
2. The second user freezes the funds creates a buy or sell order
3. The process of order matching is in progress
4. After matching, funds are unfrozen and transferred to the user

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Process example:

1. For example, a user wants to sell bnb and buy eth, for this he creates an order to buy eth and makes a request for a smart contract on the Binance Smart Chain, this smart contract freezes the user's funds and generates an order creation event

2. The rest of the users listen to events and write them to the local database, periodically clearing the database, for example, the second user wants to sell eth and buy bnb, for this he creates an order to sell eth and makes a request to the smart contract of the Ethereum network where his funds are frozen
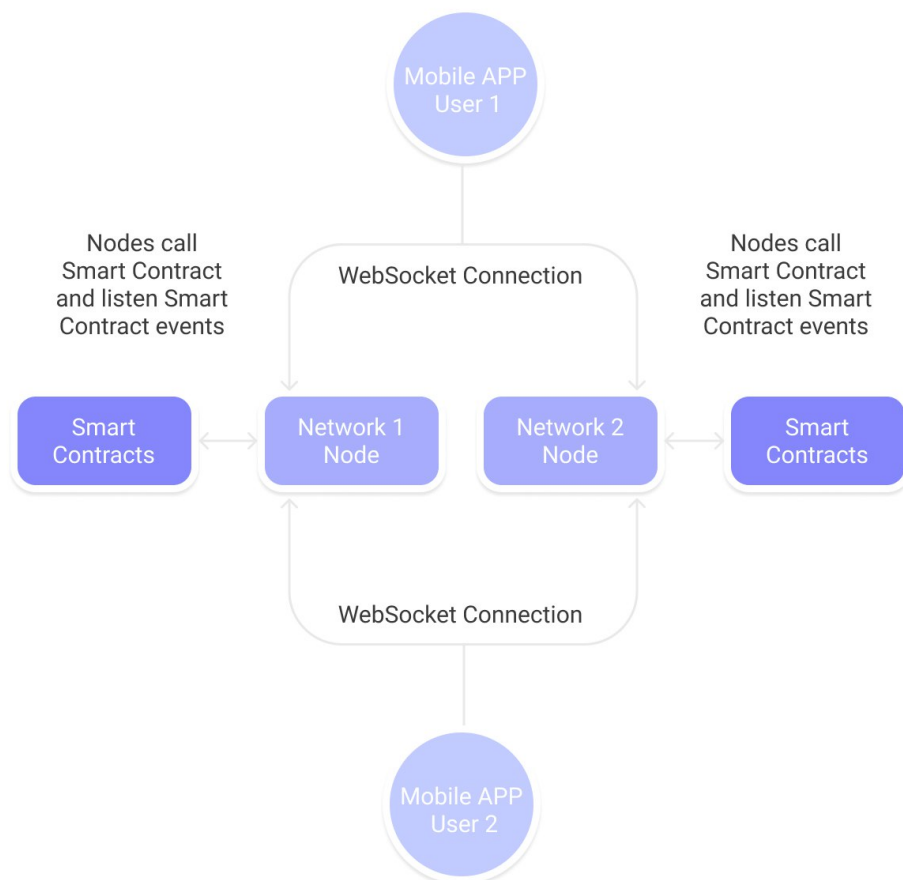
3. At this stage, users have frozen their funds, and the process of order matching begins, as soon as the process ends, requests to close the order and transfer funds to another user will be sent to two smart contracts.
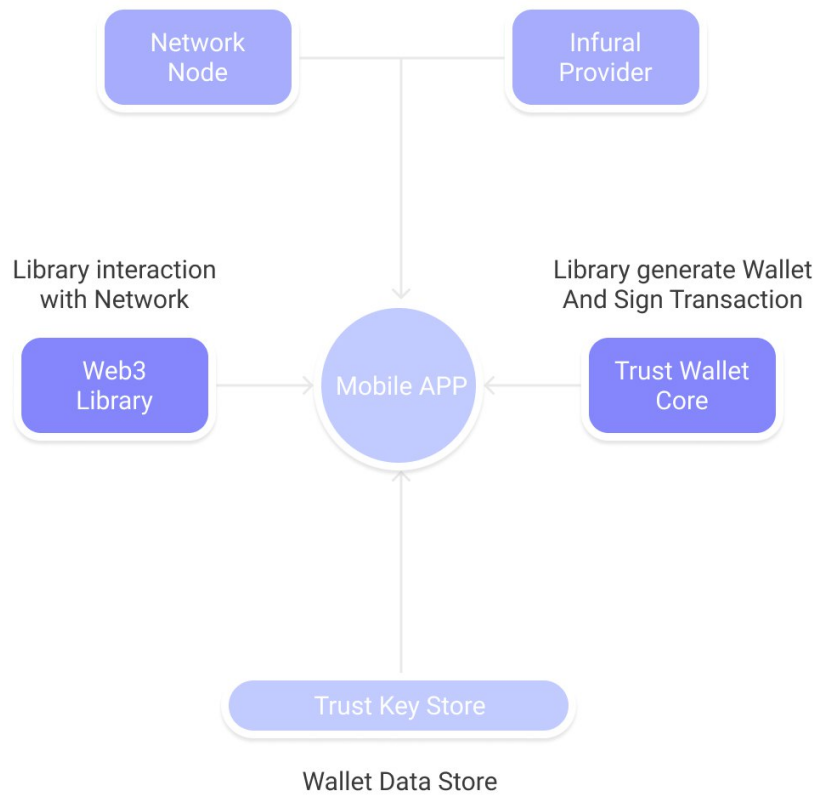
This whole scheme will be implemented based on smart contracts and events that generate these smart contracts. It is assumed that for each network a smart contract will be developed with order logic and the function of freezing funds

Here it is described how the mobile application will listen to events, all listening to the event will be reduced to node connections via web sockets to receive data in real time.

Security and web3

The main library for interacting with blockchain networks is the Web3 library. This library specializes in integration with blockchain nodes. The web3 library provides functionality for calling smart contracts and signing a transaction. In networks where there is no support for the web3 library, the TrustWalletCore library will be used, with the help of this library a naked transaction with the necessary data will be formed and signed using the same TrustWalletCore.

Inka Wallet is a decentralized wallet and all data about the wallet will be stored in encrypted form on a mobile device; TrustKeyStore will act as a base on a mobile device.This database is an ideal tool for storing addresses and private keys in encrypted form. Interaction with networks will take place through verified official nodes or providers that provide a

Network Node — Infural Provider

Library interaction with Network

Library generate Wallet And Sign Transaction

Web3 Library — Mobile APP — Trust Wallet Core

Trust Key Store

Wallet Data Store

ready-made infrastructure for interaction, and already signed transactions on a mobile device will go to these nodes.

11. Core team and background

Background

The *Inka* team has a great experience connected with decentralized finance, decentralized cloud stores for data processing and transmission, crowdfunding blockchain platforms, crowdfunding platform for investment loans, projects related to blockchain protocols for cloud computing, since 2016.

The list of blockchain projects are:

1.https://prometeus.io (developed a product from scratch)
2.https://beta.ignite.so (developed a product from scratch)
3.https://prometeus.io/stoa (developed a product from scratch)
4.https://rocki.app (transfered to blockchain technology)

The *Inka*'s team

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Artur is the CTO of *Inka* , Cryptographer, Blockchain Architect, Technical consultant at Prometeus Labs.
He has over 5+ years of technical experience as a product leader in the international blockchain projects.
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Aibek is the Team Leader of *Inka*, Blockchain Developer.

He has 3+ year experience in developing of international blockchain projects and responsible for technical part of Inka. Aibek is technical consultant at Prometeus Labs
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Aiman Mirzakhmetova

Aiman is the CEO of the *Inka*. She has 15+ years of experience as a CEO, COO in corporate companies with annual turnover about 100 mln USD.
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12. Disclaimer

This document is intended for general information based on the proposal and experience of *Inka* development. It should not be construed as professional financial investment advice and should not be used in evaluating any investment decision. This document reflects the current views of the authors and is not compiled on behalf of **Inka Corporation** or its affiliates. Please follow the latest product updates on the official website www.inka.finance. For all questions, please write to info@inka.finance

13. Summary

Inka is a multi-chain wallet created by Inka Corporation. *Inka* provides consumers access to decentralized financial services and cryptocurrencies, including stablecoins, simultaneously on several chains, allowing them to exchange, investing and earning from various digital assets within one *Inka* Wallet, giving consumers the best choices for investing money.

Inka has a huge potential for development, as it covers not only the provision of the best decentralized services and cryptocurrencies, but will also gradually expand its functionality to lending, derivatives, securities issuance, etc.

14. Contact us

If you have any questions, please contact us:

info@inka.finance (General Questions)
ceo@inka.finance (Partnerships)
cto@inka.finance (Technical Issues)

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