

# Litepaper

## Daria BOND: A Blockchain-Adopted Smartphone and it's Ecosystem

### Abstract:

MULTIWAYS International L.L.C., in partnership with MULTIWAYS Technology L.L.C., has developed a revolutionary smartphone and its ecosystem that rewards users for their, either automated or manual smartphone activities, based on their preferred smart contract interactions. The ecosystem is built on a distributed private ledger using proof of authority consensus protocol for server nodes, and proof of activity consensus protocol for client nodes. This litepaper outlines the design and development of this ecosystem, and the benefits it provides to users.

### Introduction:

The smartphone industry has seen unprecedented growth in recent years, with over 3.8 billion smartphone users worldwide as of 2021. Despite the widespread use of smartphones, the industry remains highly centralized, with data and activities controlled by a small group of corporations. This centralization creates a lack of transparency and unfair reward distribution for users who contribute to the ecosystem.

MULTIWAYS International L.L.C. as a hardware design company is in cooperation with MULTIWAYS Technology L.L.C., a software and ecosystem design company, which are pioneering the development of a blockchain-adopted smartphones and its ecosystem that enables users to be rewarded for their activities.

### Problem:

The current smartphone ecosystem is highly centralized, with users' data and activities being controlled and monetized by large corporations. This creates an imbalance in the distribution of wealth, with a small group of individuals reaping the majority of the benefits. Furthermore, users' data and privacy are not always protected, and there is a lack of transparency in the monetization and reward distribution process.

### Solution:

MULTIWAYS International L.L.C. has developed a blockchain-adopted smartphone and its ecosystem that uses a distributed private ledger to ensure transparency and fair reward distribution. The ecosystem is built on a proof of authority consensus protocol for server nodes, and a proof of activity consensus protocol for client nodes. This ensures that users are rewarded for their activities on their smartphones, and that the ecosystem is fair and transparent.

The MULTIWAYS ecosystem includes several unique features, including an embedded client node working with a proof of activity consensus protocol, a built-in wallet to distribute and store rewards pegged to the fiat currency, a blockchain explorer for transparency, and a soft wallet to send and sign parallel transactions to the blockchain. The ecosystem also includes a super application that interacts with the blockchain (Daria-Chain) and provides monetization offers to Daria BOND smartphone owner community.

### Benefits:

The MULTIWAYS ecosystem provides several benefits to users, including:

Fair reward distribution: The proof of activity consensus protocol ensures that users are rewarded for their activities on their smartphones.

Transparent ecosystem: The distributed private ledger and blockchain explorer ensure transparency in the monetization and reward distribution process.

Secure ecosystem: The distributed private ledger and built-in wallet ensure that users' data and privacy are protected.

Monetization opportunities: The distributed application provides monetization opportunities to the smartphone owner community.

#### Roadmap:

- Q1 2021
  - Business model planning
  - Team and developer recruitment
- Q2 2021
  - Operating System Prototyping
  - Adopting OS into a simple prototype
- Q3 2021
  - Hardware prototyping
  - System Applications development
- Q4 2021
  - System re-construction
  - ODM Contracting
- Q1 2022
  - Core essentials development
  - Wallet and blockchain development
- Q2 2022
  - Research and development of hardware components
  - Design of the Daria BOND Blockchain Adopted Smartphone
- Q3 2022
  - Implementation of Android Operating System and contribution in AOSP
  - Research and development of ecosystem
- Q4 2022
  - MVP device and testing
  - Development of DariaOS continued
  - Research and development of blockchain consensus design based on Proof of Activity for Client nodes and Proof of Authority for Server nodes
  - Trade mark registration in UAE
- Q1 2023
  - Finalizing of smartphone device and Android operating system
  - Blockchain adaptation testing
  - registration of smartphone on GSMA
  - CTS (Compliance Test Suit) and GMS pass for Android operating system
  - In-house testing with simplified monetization applications
- Q2 2023
  - Built-in wallet, soft wallet, and explorer development
  - Blockchain adaptation testing with simplified monetization applications.
  - Expanding ecosystem with fundamental monetization packages

- Product launch and start of sales with provided Own2Earn, Validate2Earn, Sell2Earn utilities.
- Q3 2023
  - B2B partnerships and ecosystem expansions
  - Additional monetization utilities such as Test2Earn, Participate2Earn
  - Blockchain adaptation testing with expanded monetization applications.
- Q4 2023
  - Converting monetization applications to a supper application
  - New B2B partnership with the focus on advertising companies
  - Adding View2Earn, Watch2Earn utilities
- Q1 2024
  - Gradual expansion of ecosystem with new partnerships with focus on Shopify such as commodity and consumer market service providers, shopping malls, restaurants
  - Adding value by Purchase2Earn, Fly2Earn
- Q2 2024
  - More B2B partnership with said establishments and companies to provide more monetization/discounting/rewarding packages
  - Research and development of new monetization utilities such as Talk2Earn, Collect2Earn, Provide2Earn
- Q3 2024
  - Community expansion
  - More B2B partnership with said establishments and companies to provide more monetization/discounting/rewarding packages.
- Q4 2024
  - New contracts and ecosystem expansion to provide Talk2Earn, Collect2Earn, Provide2Earn utilities in our ecosystem.
  - Research and development of new monetization utilities
  - Expanding ecosystem and new partnerships with focus on tourism industry such as hotel chains, airlines, and travel agencies.

#### Daria-Chain and Consensus Mechanism:

The Daria-Chain used in the MULTIWAYS ecosystem has a BFT hybrid consensus mechanism, combines Proof of activity and proof of Authority protocols. This hybrid approach to consensus provides a high degree of network decentralization, while significantly increasing both network security and transaction execution speed.

Embedded Client Node on Smartphones works under proof of activity consensus to validate and timestamp interactions with smart contracts, while the proof of authority consensus protocol ensures that only authorized server nodes can generate blocks and add them to the distributed private ledger. This provides a high level of security and prevents malicious actors from altering the blockchain.

The proof of activity consensus protocol, on the other hand, incentivizes smartphone users to validate transactions and earn rewards. This consensus protocol ensures that the ecosystem is fair and transparent, and that users are rewarded for their activities on their smartphones.

Together, these dual-protocol consensus mechanisms create a highly decentralized, secure, fair, and transparent ecosystem that rewards users for their contributions and activities.

There are several ways for smartphone owners to earn rewards within the MULTIWAYS ecosystem, including:

**Own2Earn:** Owners can earn rewards simply by owning a Dario BOND smartphone. They will receive regular rewards based on the snapshots of their network availability.

**Validate2Earn:** Daria BOND Owners can also earn rewards by validating the transaction activities of in Daria-Chain, by validating each transaction, they will receive a shared reward with other active validator nodes.

**Sell2Earn:** This utility will allow users to earn rewards by promoting and selling the Daria BOND smartphones to their friends and relatives. Users will be able to generate unique referral links through our application with their wallet address connected to the referral link, which they can share with others. When someone clicks on this referral link and makes a purchase of the Daria BOND smartphones, the user who owns the referral link will receive a sales commission.

**Test2Earn:** This utility allows users to earn rewards by participating in beta testing of Android Operating System applications. Users will be able to access the beta testing program, where they can sign up for available tests.

**Participate2Earn:** This utility is designed to provide rewards to Daria BOND owners for participating and completing surveys requested by third-party institutions. Users will be able to participate in various surveys through the built-in application in their Daria BOND smartphones. The surveys may cover various topics such as market research, customer satisfaction, product feedback, and many others.

**View2Earn:** Daria BOND owners will receive rewards for viewing ads and promotions on their smartphones. Advertisers and content providers can place ads and videos on the Daria ecosystem, and Daria BOND owners can choose to watch them in order to earn rewards.

**Watch2Earn:** This utility is a monetization feature that allows Daria BOND owners to earn rewards by watching videos or ads. This feature is similar to the View2Earn utility, but with a key difference; with Watch2Earn, users are required to watch the entire video or ad before they can earn the reward.

**Purchase2Earn:** The Purchase2Earn utility allows Daria BOND owners to earn rewards for purchasing products or services from partner companies. These partner companies will be carefully selected to provide users with relevant and attractive offers that match their interests.

**Fly2Earn:** Daria BOND owners can earn rewards by booking flights and travel within the MULTIWAYS ecosystem.

**Talk2Earn:** This is a utility that provides incentives for users to make phone calls with their Daria BOND smartphones. By participating in Talk2Earn, users can earn rewards in the form of bonuses for making calls.

**Collect2Earn:** Daria BOND owners can earn rewards by collecting NFTs, art works or digital assets specified by third-party trusted companies. The NFTs and digital assets can be collected through various methods such as scanning QR codes, visiting certain locations, or completing specific tasks.

**Provide2Earn:** This utility allows Daria BOND owners to earn rewards by contributing to the Daria-Chain with their skills and knowledge. The utility will offer various tasks that require certain skills, such as coding, graphic design, writing, translation, etc.

The rewards earned by smartphone owners can be stored in their built-in wallets within the MULTIWAYS ecosystem. These wallets are secure and easy to use, allowing owners to store, transfer, and use their rewards as they see fit.

The monetization system within the MULTIWAYS ecosystem is designed to be fair, transparent, and easy to use. It provides a variety of ways for smartphone owners to earn rewards and participate in the ecosystem and encourages collaboration and participation.