Reputation is a fundamental concept that has been central to human social interactions and interrelationship. It refers to the collective, transactions, beliefs or opinions held by others about a person or entity, and it can have a significant impact on trust, credibility, and success, especially in the digital world. With the rapid growth of the Web3 space, which involves multimillions of users, billions of transactions, and hundreds of millions of wallet addresses on various blockchains, in a decentralized manner, measuring the specific reputation of an entity has become increasingly important.

## Coinbase calls for onchain Reputation

Recently, Coinbase calls onchain Reputation builders for its Base Ecosystem Fund.

The Base's request for builders claims that "decentralized identity

and reputation

will play a critical role in defining each individual's onchain persona, and reputation protocols (like Google Pagerank type) should natively support onchain entities to build trust onchain, while preserving user privacy and autonomy."

## **Octan Solution**

Inspired by Google PageRank, Octan Network has researched onchain reputation problem since 2019 with two scientific research papers published on globally-recognized academic journals. In 2022, we invented Octan Reputation Ranking System

, a powerful engine that uses advanced mathematical ranking algorithms (e.g. adaptive Pagerank, Hodge Rank) to calculate the reputation scores of users and other entities from onchain transactions within various Web3 ecosystems. Reputation scores can be carried by Octan soulbound token, a kind of Web3 ID, to prove user trustworthiness across multiple chains.

Together with reputation ranking, Octan also labels and classifies onchain entities to make onchain data more readable and understandable. Then, Octan Analytics Platform aggregates reputation scores, labels, identification & classification to extract valuable social insights and user persona in Web3 space, providing investment firms, venture capitals, media agencies, communities, a universal metrics and quantitative methods to evaluate dapps, to segment users.

## **Octan's Applications**

Octan solution is similar to Google Analytics but distinguished from Chainalysis, Nansen, Dune Analytics, Arkham and other onchain analytics firms. Reputation scores and Octan analytics solutions has direct applications in Web3 marketing problems (e.g. user qualification & segmentation, preventing bot/clone account, whitelisting for airdrop/retro/IDO campaigns, etc) and dapp evaluation (measuring a dapp's importance & impact within a blockchain ecosystem, its user quality by reputation scores).

We highly appreciate any feedbacks and comments.