Oracles: How Smart Contracts Connect To The World

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Workshop Agenda

1. Introduction to the "oracle problem"
2. How Charli3 solves that problem
3. Cardano: soon to be the largest ecosystem of Dapps and DeFi
4. Charli3's role in scaling Cardano
5. Q & A: Cardano, Charli3, Oracles, the future

This workshop is intended to provide a non-technical introduction to Oracles and is appropriate for retail investor, entrepreneurs, and developers looking to understand what is available on the Cardano blockchain.

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Smart Contract Revolution

- The Web 3.0 smart contract revolution is already happening.

- Thousands of decentralized apps and finance solutions (DaPPs/DeFi) that run on blockchains with smart contract functionality are going to be built within the next 24 months.

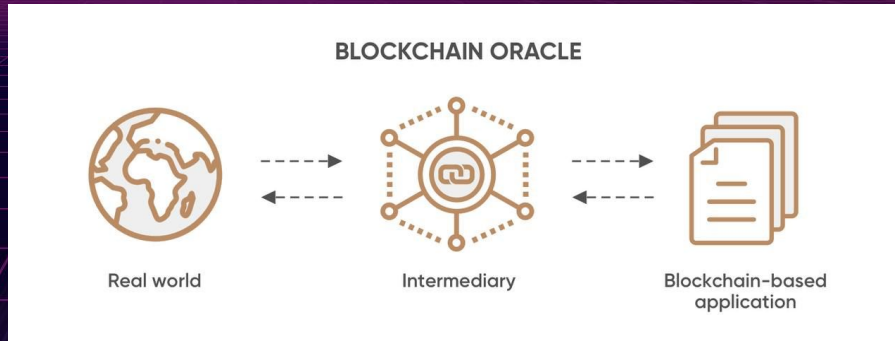- A large percentage of those solutions will require Oracles for external off-chain data in order to function

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What the F@ck is an Oracle?

- Crypto

  - Mystical internet Monies

  - Universal Decentralized Currency

  - Oracles help connect Blockchain to the world

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The Oracle Problem

A **smart contract** can only consume data about other events on the same blockchain.

In order to consume data from off-chain (either from non-blockchain data sources or from other blockchains) there needs to be a bridging solution

BLOCKCHAIN ORACLE

Real world   Intermediary   Blockchain-based application

Further reading: Oracle Problem Definition
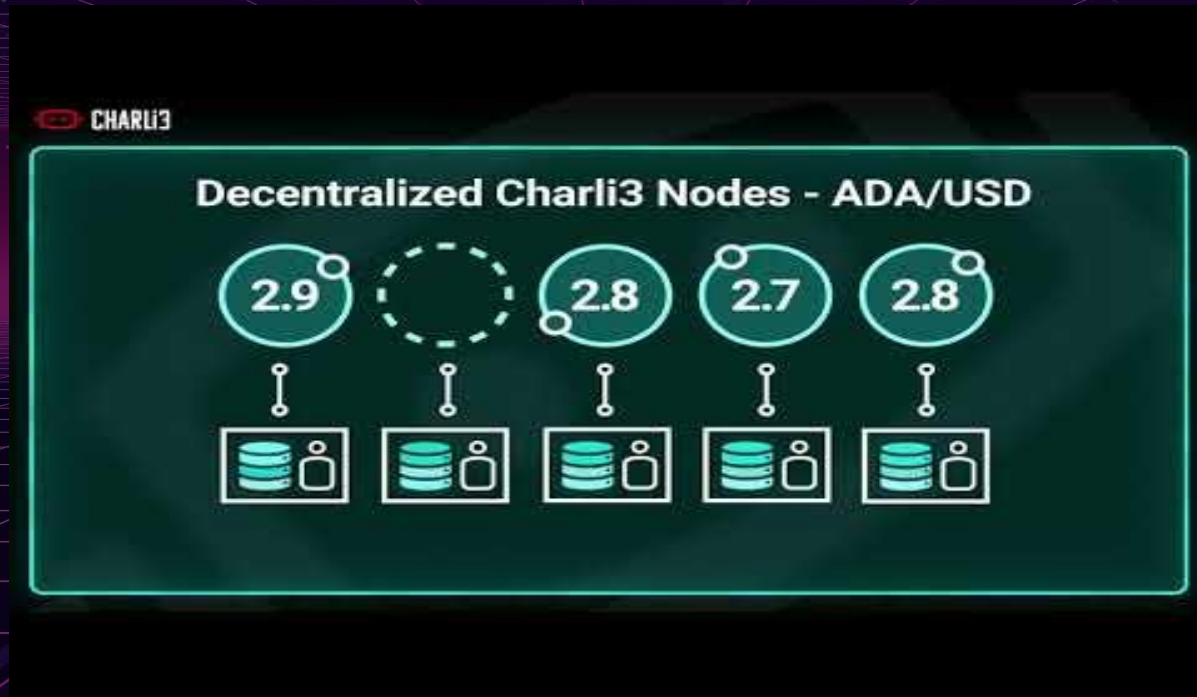
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Charli3's Solution

1. Natively built on Haskell for initial Cardano use

2. Aggregates data from external sources using APIs (Application Processing Interface)
    - Multiple end points for decentralization (node operators and APIs)
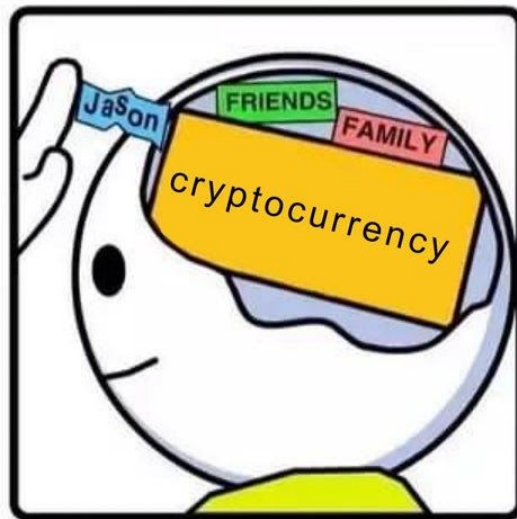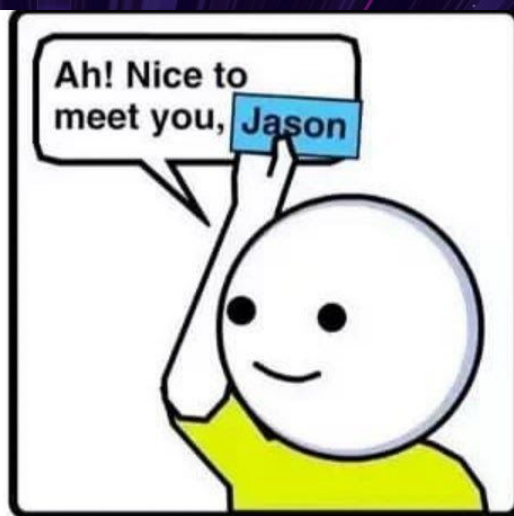   a. Ensures accuracy and validity

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Ecosystem Oracle users

Data Consumers

- **Data Consumers:** DaPP/DeFi/other solution utilizing smart contracts which require external data sources to function

- **Charli3 <> Consumers:**
  - Partner projects consume data on an on-going basis

  - The projects use C3 tokens to pay the Charli3 Oracle network for its services, which includes providing data, verifying correctness and keeping it secure through the process

  - The C3 tokens paid goes to API providers and Charli3 node operators to keep everything running

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Technology Overview

Why Cardano?

- Ethereum, Cardano, Polkadot, Solana, etc. -- Many blockchains offer smart contract functionality
- Community and stability
- Philanthropy
- Cardano is highly scalable and more secure
  - Low gas fees vs. High gas fees
  - Smart Contract functionality isn't fully built out yet; but the developer community is one of the largest in the world already
- efficiency and to support the ecosystem we believe will be the largest in the world

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Charli3 Oracle's Vision

1. **Smart contract technology, DaPPs, DeFi, and web 3.0** will transform the world as we know it -- in the same way that the browser changed access to the internet and the cloud enabled software "to eat the world" -- DLT, Smart contracts, and etc. will transform the way traditional companies set up their infrastructure.
2. **Oracles are the hidden backbone that enable DaPPs and DeFi to run** *(Forbes Article on the topic)*
3. **Cardano is positioned to have the largest ecosystem of independent DaPP/DeFi projects**
4. **Hundreds of well-funded Cardano DaPP/DeFi projects are on the verge of launching**
5. **There is not yet a native oracle solution on Cardano to support their launch**
6. **Charli3's 12-24 month goal** is to successfully enable as many projects as possible in the Cardano ecosystem; we hope to achieve partnerships with 150+ data consumers in this period.
7. **Charli3's long term mission** is to enable mass smart contract adoption across all chains, geographies, and industries
8. **Our vision is to enable the mass adoption of smart contract technology to improve the lives of all people**, and in particular the lives of those in countries that currently do not have the appropriate infrastructure in place to support their people (e.g. a DeFi app in Africa may enable local businesses to build wealth).

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Q&A

- Potential ideas for projects that oracles make possible?

- Real world data that oracles might be useful to bring to the blockchain?

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Find out more about Charli3

To find out more about Charli3, please visit charli3.io. Here you can..

- Contact us about making use of us as a partner project

- Find out more information about our technology and purchase our C3 token

- Check out our other posts and information in our social media

  ○ Charli3 Website

  ○ Charli3 Telegram

  ○ Charli3 Medium

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