## **Worldcoin Analysis Report**

Filament Quant Hackathor

Problem 15

**Team Rizz** 

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## **About Worldcoin**

- Worldcoin is an iris biometric cryptocurrency project developed by San Francisco- and Berlin-based Tools for Humanity.
- Founded in 2019 by OpenAl chief executive Sam Altman, Max Novendstern, and Alex Blania, it is backed by VC Andreessen Horowitz.
- It is a Ticker WLD on optimism a Layer 2 for Etherium.
- Orb scans the iris and then it is converted into a unique iris code which becomes the User's world ID. The iris scan becomes a differentiator between humans and AI.
- Worldcoin claims the iris scans are deleted after being converted into a unique iris code.
- The World ID is then stored on a decentralized blockchain to prevent fakes or duplicates.
- Worldcoin has currently 2.5 millions user.

## Worldcoin's model to gain users

• Major operations are being done in developing countries only.

## **Active Users Deception**

Worldcoin has established that in order to obtain 1 WLD token weekly, users are required to regularly engage with their World App. Thus it potentially inflates active user counts and misleading metrics which is one of the force for WLD price hype.

## Registration

The offer of 25 WLD tokens from Worldcoin serves as a significant incentive for individuals to register their iris, driving widespread participation in exchange for the tokens.

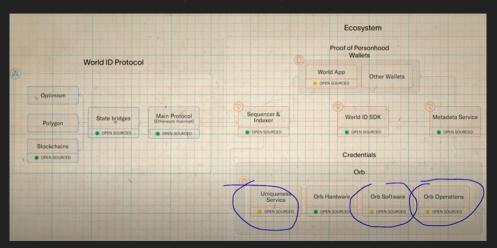
### **Orb** operators

Orb operators are paid between \$1 and \$5 for each eye scan conducted to give them motive to scan as much eyes as possible.

### **Critical Aspects**

- The software and operation of the Iris scanning Orb is not open-source which makes experts sceptic towards it.
- Earlier, Orb used to share iris data to tools for humanity. However now Worldcoin claims users' permission is required to share the iris data. Since Orb's software is not open-source, its impossible to verify this claim.
- Ex-CEO Max appears to have stepped down from project in January 2021. Now Alex is the new CEO.
- Germany, France and UK are conducting thorough investigation into Worldcoin.
   Worldcoin data collection is questionable according to France's CNIL data regulation laws.
- Worldcoin employs deceptive methods to inflate the count active users.
- Tokenomic section of WLD is banned in many countries.

## Open source map of Worldcoin



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## World ID 2.0

- World Id is a unique hash code generated by the iris scan for every person. It's a universal identity of a person in digital world.
- With the addition of Apps for integrating and authenticating online accounts using World ID, World ID 2.0 improves upon the initial edition. The redesigned Worldcoin App Store offers users the opportunity to explore these apps, which include interfaces with Reddit, Discord, Shopify, Minecraft, and Telegram.
- Users can reestablish their identity if it is lost or stolen with World ID 2.0. The previous identity is rendered invalid by re-verifying at the Orb, after which a new identity is issued and authenticated there.
- Through global World ID 2.0 Identity data is owned and controlled by users. granting and confirming access within the network. strives to integrate with other decentralized identification schemes.

#### Launch

- It was launched on December 13, 2023 and bought a sudden price surge in WLD token.
- A large number of WLDs were withdrawn from CEX after Worldcoin announced the launch of World ID 2.0

## **Major Updates**

- Device for World ID: Suitable for low-risk situations, this device enables apps to accept World IDs saved on reliable devices, even if they haven't been fully confirmed yet.
- World ID Orb: Provides an optimal compromise between ease of use and security for the majority of apps, where a World ID validated by an Orb suffices.
- The World ID Orb+ will use Face Auth for increased security. As with using face recognition to unlock a phone, integrating Face Authentication to an Orb-verified World ID guarantees exclusive user access for designated actions.

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## Is it really decentralized?

- Worldcoin Foundation could sell and give away to fund all the stuff needed. On that note
  worldcoin white paper notes the Worldcoin Foundation controls all the Worldcoin smart
  contracts with a four or six multi-signature wallet, which is nothing but Centralization.
- According to Worldcoin, it does not track down individual users. But, once someone uses
  the World App to spend or receive cryptocurrency from an exchange where KYC has been
  completed, it is easy to identify that person.
- According to experts the rollout of worldcoin will be the libra movement for governments around the world.

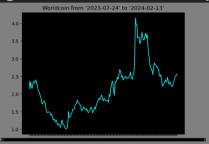
#### **Centralization Risks**

- Worldcoin Protocol: As of right now, the only frontend that can be used to access the
  protocol is the World App. TFH is the operator of the centrally managed biometric
  uniqueness service. There are few ways for outside developers to create applications on
  top of the Worldcoin protocol, and the World App is the only wallet that supports the
  WLD token (and its features within the network).
- Credentials: The only source of World ID credentials is The Orb. The protocol must
  decentralize the enrollment and verification services, increase the number of verification
  devices globally, and implement suitable third-party fraud prevention measures in order
  to issue credentials in a decentralized way. Decentralized storage of validated credentials,
  or iris codes, is also necessary (TFH currently handles this). There's also a big risk
  associated with the centralized indexing service.

The Worldcoin Orb: Users are compelled to have faith in TFH's trustworthiness because
they are the only company providing the Orbs. Even though the protocol is open-source
and the Orb design is disclosed, it is still possible to create potentially dangerous Orbs by
adding backdoors. To further add to the confidence, the Orb private keys are kept on a
centralized server..

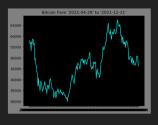
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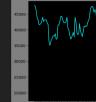
## **Trend Allignment with other cryptocurrencies**



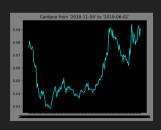
 We used cosine similarity on trends of upto 10 years of 50 other crypto currencies to find out similar trends. The model used can be found here. Model. (Note: The Model is creted by us exclusively for this hackathon)

Bitcoin from '2021-04-29' to '2021-12-31' and from '2021-12-31' to '2022-10-23'

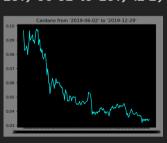




Cardano from '2018-11-04' to '2019-06-01' and from '2019-06-02' to '2019-12-29'

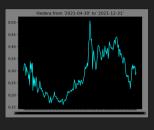




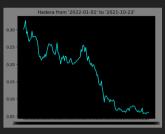


Bitcoin from '2021-12-31' to '2022-10-23'

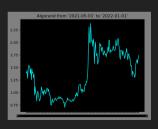
### Hedera from '2021-04-30' to '2021-12-31' and from '2022-01-01' to '2022-10-23'







Algorand from '2021-05-01' to '2022-01-01' and from '2022-01-02' to '2022-10-23'







- Most of cryptocurrency that showed similar trend to that of Worldcoin's trend at some
  point in their timeline followed a bearish trend after that. This indicates a bearish short
  term bearish signal for Worldcoin.
- Moreover the aftermath of the recent decision taken was not that much effective as it was supposed to be to surge the price of the crypto.

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## **Recent Updates**

- The price of Worldcoin has recently increased significantly. When a well-known whale wallet removed 2.09 million WLD tokens (\$ 5.82 million) from Binance, the price of Worldcoin increased by 25 %.
- Orb verification is no longer available from Worldcoin in Brazil, France, or India. The crypto firm made this choice only a few months after bringing its helmet-shaped eyeball-scanning gadget to those markets.
- To introduce new users to the site, Worldcoin set up pop-up kiosks throughout India, drawing large crowds as people waited in line to join up and receive free tokens.
- Worldcoin is still dedicated to "working with partners globally to ensure it meets regulatory requirements and provides a safe, secure, and transparent service for verified humans" in spite of its abrupt withdrawal.

## Reason of current surge in price

- Declaration of Extra Funding: Sam Altman, CEO of OpenAI, declared that the company is looking for more money for Worldcoin1. The demand for and price of the WLD token increased as a result of this news, which probably increased investor confidence.
- Significant Protocol Update: Worldcoin revealed new platform integrations and a significant protocol update2. These changes frequently result in more people becoming interested in and investing in cryptocurrencies, which can raise their price.
- Increased Usage: More than 2.6 million users have used the orb devices from Worldcoin to obtain cryptocurrency and distinctive digital IDs1. This demonstrates the project's expansion and might have played a role in the price increase.
- Release of World ID 2.0 with additional features.

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## **Our Call on Worldcoin**

## **Bearish**

## Why Bearish?

- Although Worldcoin is an ambitious project with great significance, there are several obstacles in the way of its success. There are a lot of dangers because of the ambiguous legislative environment and privacy concerns surrounding data gathering.
- Furthermore, the broad acceptance of World ID 2.0 and its interaction with other solutions are critical to its success.
- As a result, in the short to medium term, we would lean slightly pessimistic on Worldcoin. Nonetheless, it is important to consider the long-term possibilities of decentralized identification systems like World ID 2.0. Future advancements and a change in the regulatory environment may have a favorable effect on the project's course.
- But none the less, we would like to go Bearish and it can be observed on the other cryptos in the past with similar situation.

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