Blockchain + Cryptocurrency

EDPX 3350/4350 – WINTER 2018 Abigail Murphy + Heidi Landis

CRYPTOCURRENCY ANALYSIS

- Electronic cash system that uses a peer-to-peer network to prevent double-spending. This involves limited entries in a database that no one can change without fulfilling specific conditions.
- ICO's are essentially a GoFundMe for cryptocurrency. Money can be raised without regulations, and the system deals specifically with supporters and shareholders rather than investors.
- ICOs are often used to fund the development of new cryptocurrencies. The pre-created token can be easily sold and traded on all cryptocurrency exchanges if there is demand for them.

CRYPTOCURRENCY ANALYSIS

- One of the easiest application of Ethereum's smart contract system is to create a simple token which can be transacted on the Ethereum blockchain instead of Ether.
- Many dApps are centered around competition/gaming. Our interests were centered around offering/education.
- First project focused on local impact. This project, we focus on global impact.

WATER

is vital for all known forms of life.

It is estimated by 2025 more than half the world population will be facing water-based vulnerability.

By 2030, in some developing regions of the world, water demand will exceed supply by 50%.





2.1 BILLION

people around the world don't have access to safe water



4 HRS/DAY

Women and children spend more than four hours walking for water each day





840,000+

people die each year from water-related diseases

CONCEPT/PROSPECTUS/ABSTRACT

ICO WATER

Create a dApp/ICO to support the development of high-quality drinking water and sanitization services that are easily accessible and continually sustained through education of strong, local communities*

This ICO WATER will appeal to many Bitcoin and Ethereum participants who desire power/control/ownership in the blockchain community



hydroglobe

ICO WATER

WATER SYSTEM

hydroglobe

Using the same system as developed by Grundfos Lifelink water supply kiosk:

Develop a water kiosk in communities that do not have direct access to a line of clean water.

The water system can collect rain water, ground water, and surface water. The water is cleaned through a solar-panel run filtration system, stored in a storage tank, and distributed through a kiosk station.



hydroglobe





SUSTAINABLE SYSTEM

Sustainability chain education creates environments

Develop a "training system" for community members as to how to maintain the water filtration system and fix any possibly problems/breakages in the system

40 of these same systems have already been developed in communities in Kenya, and are supplying water to 100,000 people in these communities

WATER SYSTEM



WATER SYSTEM PROs and CONs

Pro's of water system:

- Allows for collection of rain water, groundwater, and surface water through pump systems established underground
- Solar panels allow for the processing and filtration of the water system, establishing a selfsustaining water filtration program
- The water is distributed directly to community members in an easy to use and manage fashion

Possible Con's of water system:

- If the region lacks a constant water source, the collection of water may not be constant and water storage becomes crucial
- Possible damages to the system that may have to be repaired and could potentially limit water availability

PROJECT DEVELOPMENT NEEDS

- Design a water system similar to the Grundfos LifeLink system that uses groundwater, rainwater, and other underground water sources to collect and filter water to distribute to local communities
- Development of a "training and education program" to educate the people in the community on how the system functions and how to repair the system if problems occur
- Establish an repair program within the company to manage issues that occur with any systems and supply quick response and supplies to the involved communities

PROJECT COSTS

hydroglobe

- The World Bank a list provides of projects developed across the globe to establish and improve water to communities in need
- Based on the data given on World Bank for project investments, it is estimated that the average cost of a water development project is:

\$149,174,667

https://denverumy.sharepoint.com/personal/abigail_murphy_du_edu/ Documents/Water%20Project.xlsx?web=1

PROJECT FUNDS USE

Bitcoin and Ethereum owners "donate" money to the ICO as a start-up business and are refunded if project is unsuccessful, but increase share value if project is successful.



STAKEHOLDERS/INVESTORS



REFERENCES

https://www.waterforpeople.org

https://www.awwa.org

https://qz.com/691254/world-war-iii-will-be-fought-over-water/

https://water.org/stellaartois/?UTM_Confid=KX7EK5Ye&utm_source=UNKNOWN_ENGINE_TYPE&utm_campaign=&utm_Campaign id=0&medium=PaidSearch&utm_term=&gclid=EAIaIQobChMIobS1-tS02QIVVWp-Ch3IpgfvEAAYASAAEgK-tvD_BwE

http://islaurbana.org/english/

http://ugandanwaterproject.com/what-we-do/water-solutions/rainwater-collection-systems/

https://blockgeeks.com/guides/initial-coin-offering/

http://maps.worldbank.org/p2e/mcmap/map.html?code=WAT&level=gp&indicatorcode=0553&title=Water&org=ibrd

https://www.grundfos.com/market-areas/water/lifelink/solutions/water-kiosk-with-water-supply.html

http://www.un.org/en/sections/issues-depth/water/

ICO WATER



hydroglobe