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KNIGHTS TEMPLARS 12TH CENTURY BANK

In the 12th Century, the Knights Templar established a banking system, where pilgrims in their homeland would deposit there valuables with the Templars, before setting out on a journey to the Holy Lands.

The Templars would issue the pilgrims a coded letter containing a list of their valuables.

The pilgrims could then present the letter to another Templar and withdraw their valuables once they had reached their destination, insuring a safer passage.

FIRST **CROSS-BORDER** PAYMENTS

Cross-border payments are a common part of our modern society.

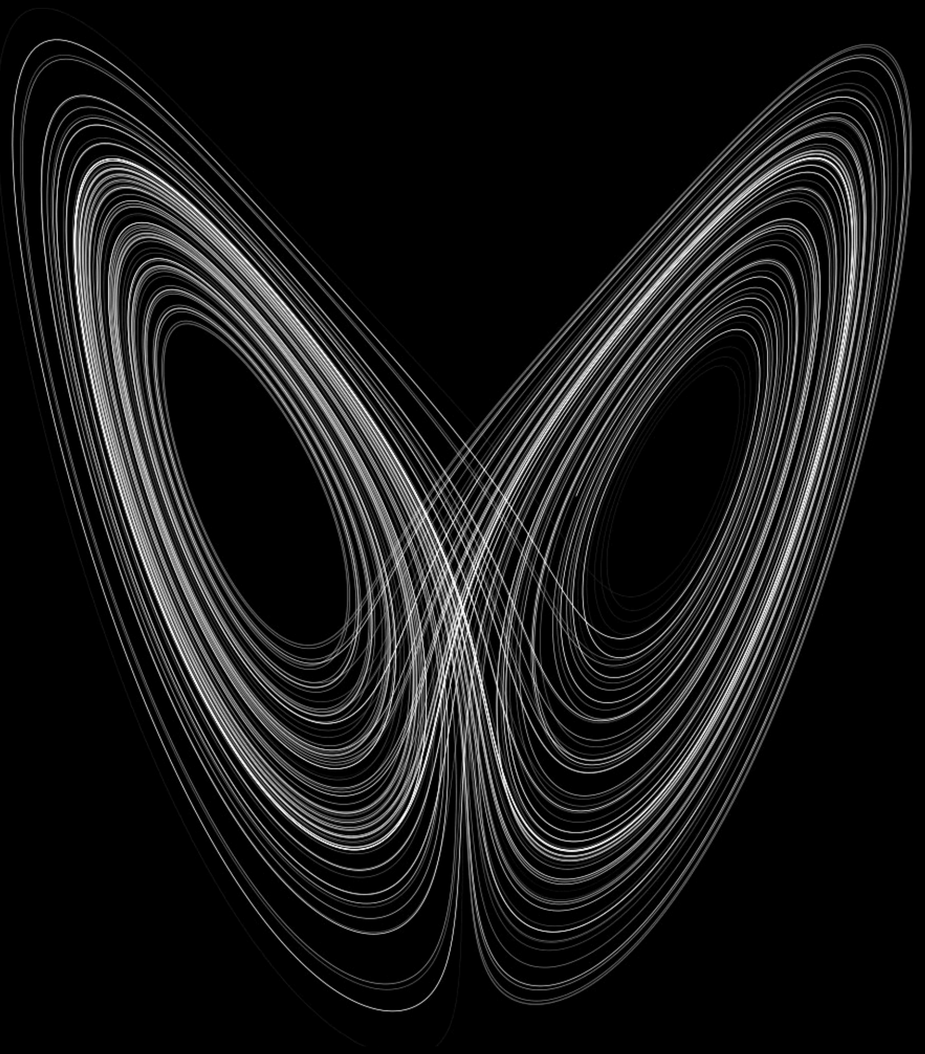
MODERN **CROSS-BORDER** PAYMENTS

But what will these payments look like in the coming years as we
push beyond the border of Earth.

NODIUS

FRAMEWORK FOR A SPACE ECONOMY

Frontiers are messy by nature because systems that provide order and security have not yet been established.



CHAOS THEORY

We can bypass some of this chaos in our frontier space economy, and create a foundational standard with stability, by using a technology called, Blockchain.

A Blockchain is a distributed database that is shared among computer network nodes.

BLOCKCHAIN IS A DISTRIBUTED DATABASE
SHARED ACROSS **NETWORK NODES**

NODIUS

NETWORK OF DIGITAL
INTELLIGENT UNIFIED
SERVERS

What is NODIUS?

NODIUS stands for Network of Digital Intelligent Unified Servers.

NODIUS IS A NETWORK OF CUBESAT NODE SERVERS HOSTING THE **OPAL BLOCKCHAIN**

OPAL

OFF-WORLD
PAYMENT / PAYLOAD
LEDGER

OPAL is a hybrid blockchain, and contains both public and private nodes.

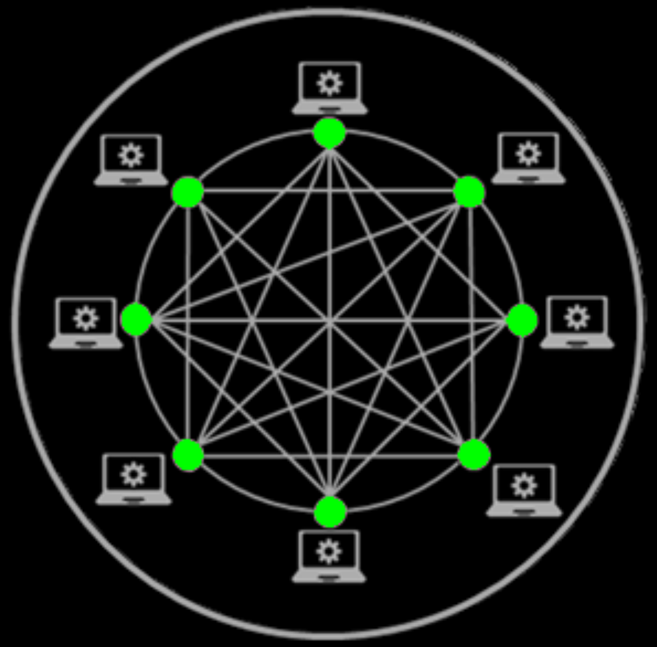
Public nodes are where anyone can participate.

Public nodes provide decentralization and transparency, making it difficult for anyone to control the node.

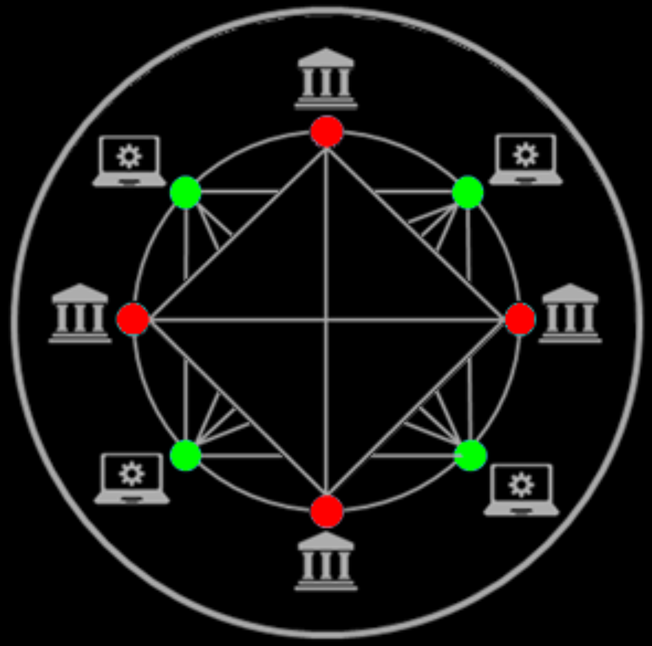
Private nodes are governed by specific individuals and organizations.

Private nodes are centralized and have greater privacy and security.

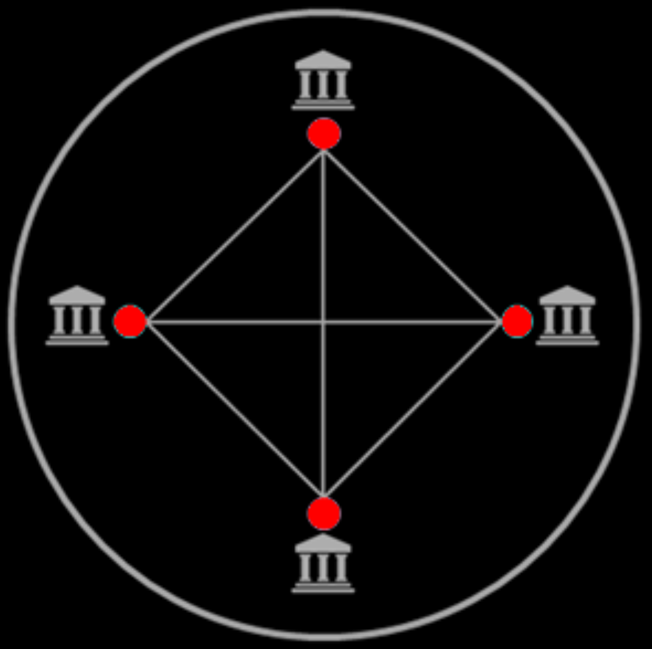
Public



Hybrid

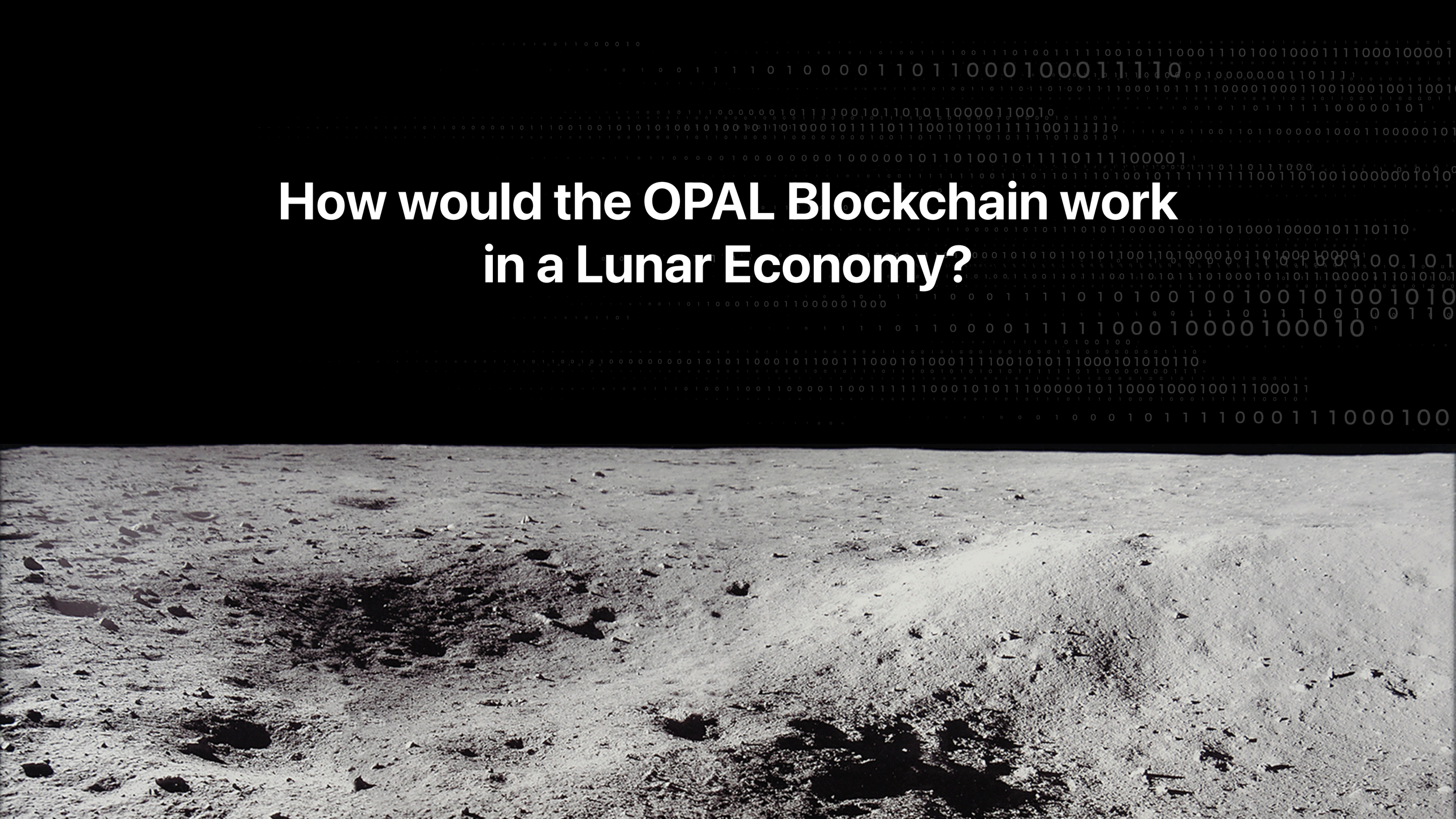


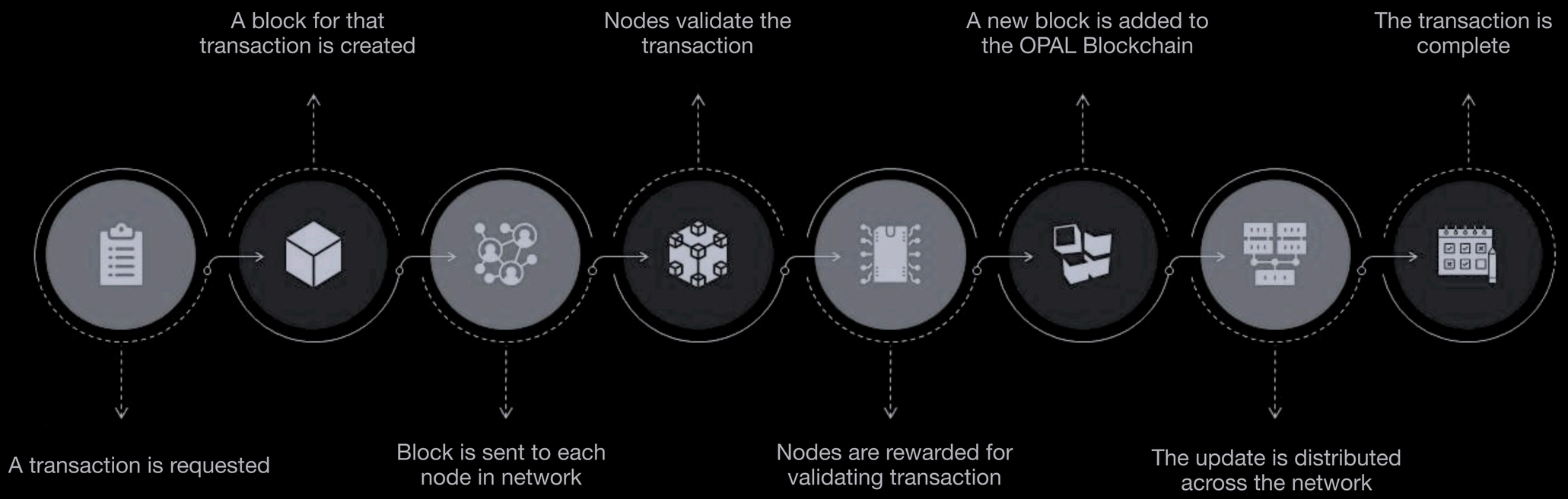
Private



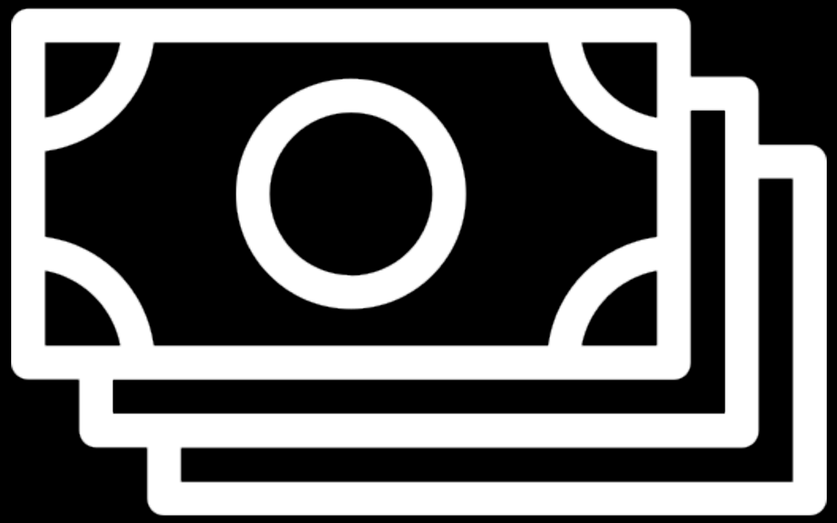
OPAL is the trusted agent between two parties on NODIUS, the network of nodes

How would the OPAL Blockchain work in a Lunar Economy?



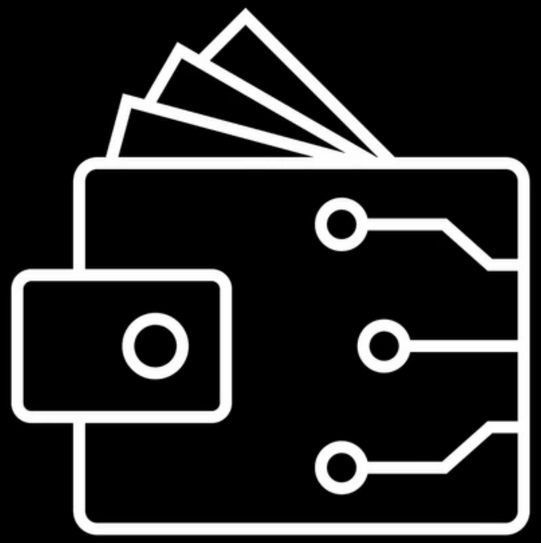


Data is stored on the OPAL Blockchain in the form of a transaction.

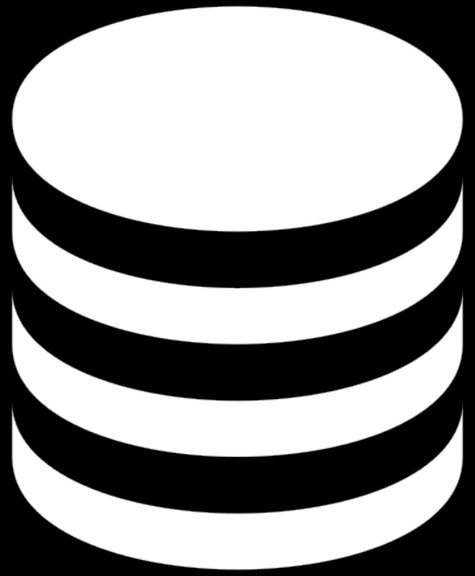


A TRANSACTION CAN BE EITHER
A **PAYMENT** OR A **MANIFEST**

WALLETS ARE THE INTERFACE OF THE OPAL BLOCKCHAIN

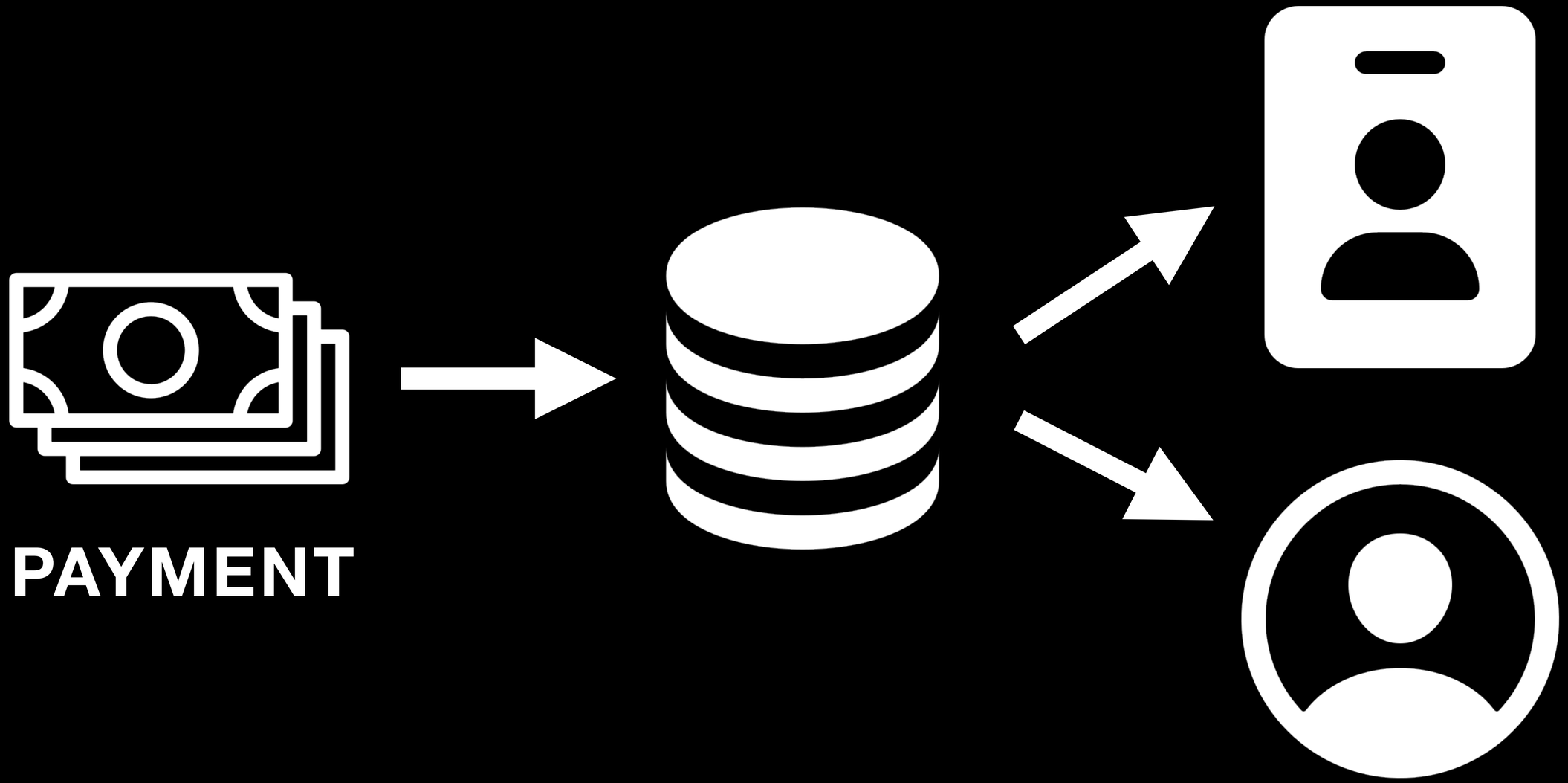


A Lunar Vendor or member of the public is assigned a wallet, based on human verification.



xOPLs

XOPLs are the tokens on the OPAL Blockchain.



A Payment is the exchange of XOPLs between Vendors and or members of the public.

A Manifest is a smart contract and an accounting tool, that contains any amount or type of data, including payments.

Types of manifest are: Payloads, Lunar Permissions, Land Deeds, Record of Resources, Vendor Stock & Fundraising, Chain of Custody for Stewardship and Ownership...

A general archive of Lunar Endeavors and Outward Expansion.

MANIFEST

- PAYLOADS
- LUNAR PERMISSIONS
- LAND DEEDS
- RECORD OF RESOURCES
- VENDOR STOCK & FUNDRAISING
- CHAIN OF CUSTODY FOR STEWARDSHIP AND OWNERSHIP

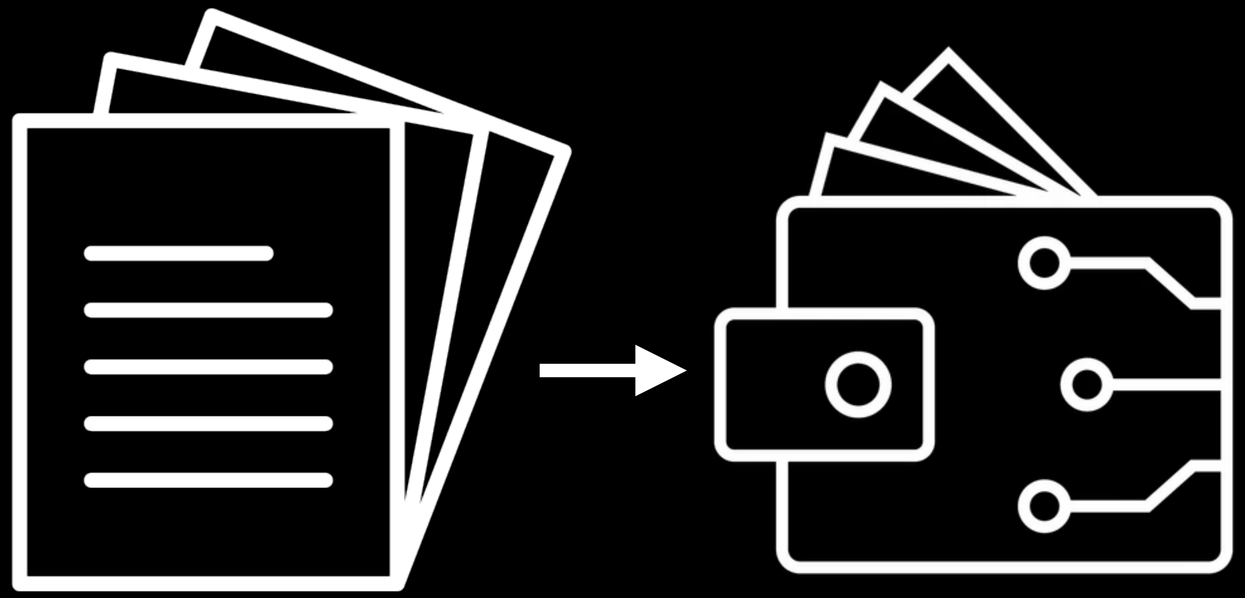
What is a use case for a manifest?

Vendor Alpha creates a manifest with Vendor Zeta for transportation to the moon.

All terms are negotiated between Vendors and recorded in the manifest.

VENDOR ALPHA

VENDOR ZETA



MANIFEST IS SUBMITTED VIA THE WALLET

THE **TRANSACTION** IS CONFIRMED ON THE NETWORK AND ONCE VALIDATED, IT WILL BE ARCHIVED ON THE BLOCKCHAIN

There are payment milestones in the lead up to launch.
When both parties agree that a milestone has been reached, payments are released from the manifest, and an update is submitted to the blockchain.

If a milestone is missed or not agreed upon, secondary conditions in the manifest are activated.

These secondary conditions come with their own pre-negotiated terms, and are for the protection of both parties.

If the secondary conditions and original terms are completed, and all milestones are achieved, and all payments have been received, then the manifest is locked.

But the manifest will stay active as long as conditions are still ongoing or in hold.

Additional Vendors may be added to an active Manifest.

In the case of our Vendor Alpha and Vendor Zeta launch to the moon, an Insurance Vendor may need access to the Manifest to determine liabilities.

INSURANCE VENDOR
VENDOR ALPHA
VENDOR ZETA

Other Use Cases for a Manifest include:

Public Engagement and Public financial investment of a Vendor.

Monitoring of human environmental impact on the moon and its resources.

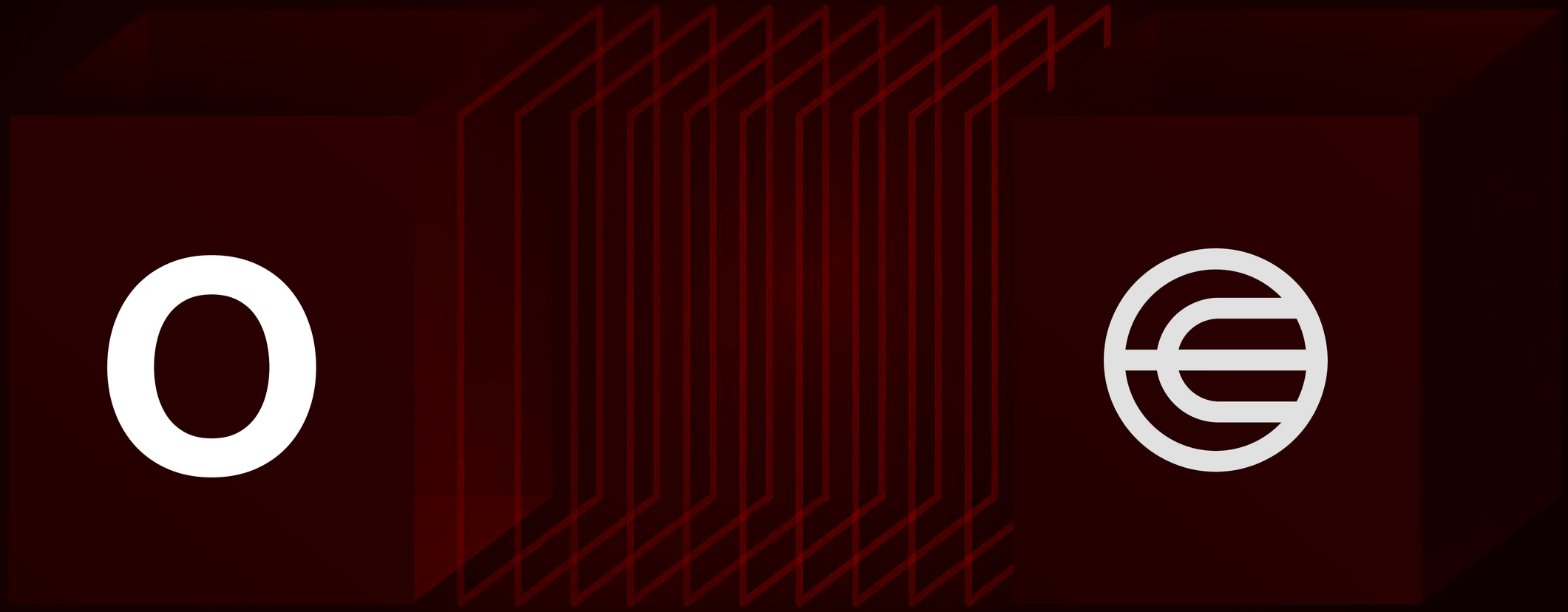
Duties placed on the mining and production of water, hydrogen, and oxygen.

Duties are placed on all mined moon resources, and allocated as a Universal Basic Income.

MANIFEST

- PUBLIC ENGAGEMENT AND PUBLIC FINANCIAL INVESTMENT OF A VENDOR
- MONITORING OF HUMAN ENVIRONMENTAL IMPACT ON THE MOON AND ITS RESOURCES
- DUTIES PLACED ON THE MINING AND PRODUCTION OF WATER, HYDROGEN, AND OXYGEN
- DUTIES PLACED ON ALL MINED MOON RESOURCES AND ALLOCATED AS UNIVERSAL BASIC INCOME

Back on Earth, the transactions from the Public and Private nodes of the OPAL Blockchain would use a bridge to the terrestrial, Worldcoin Blockchain.



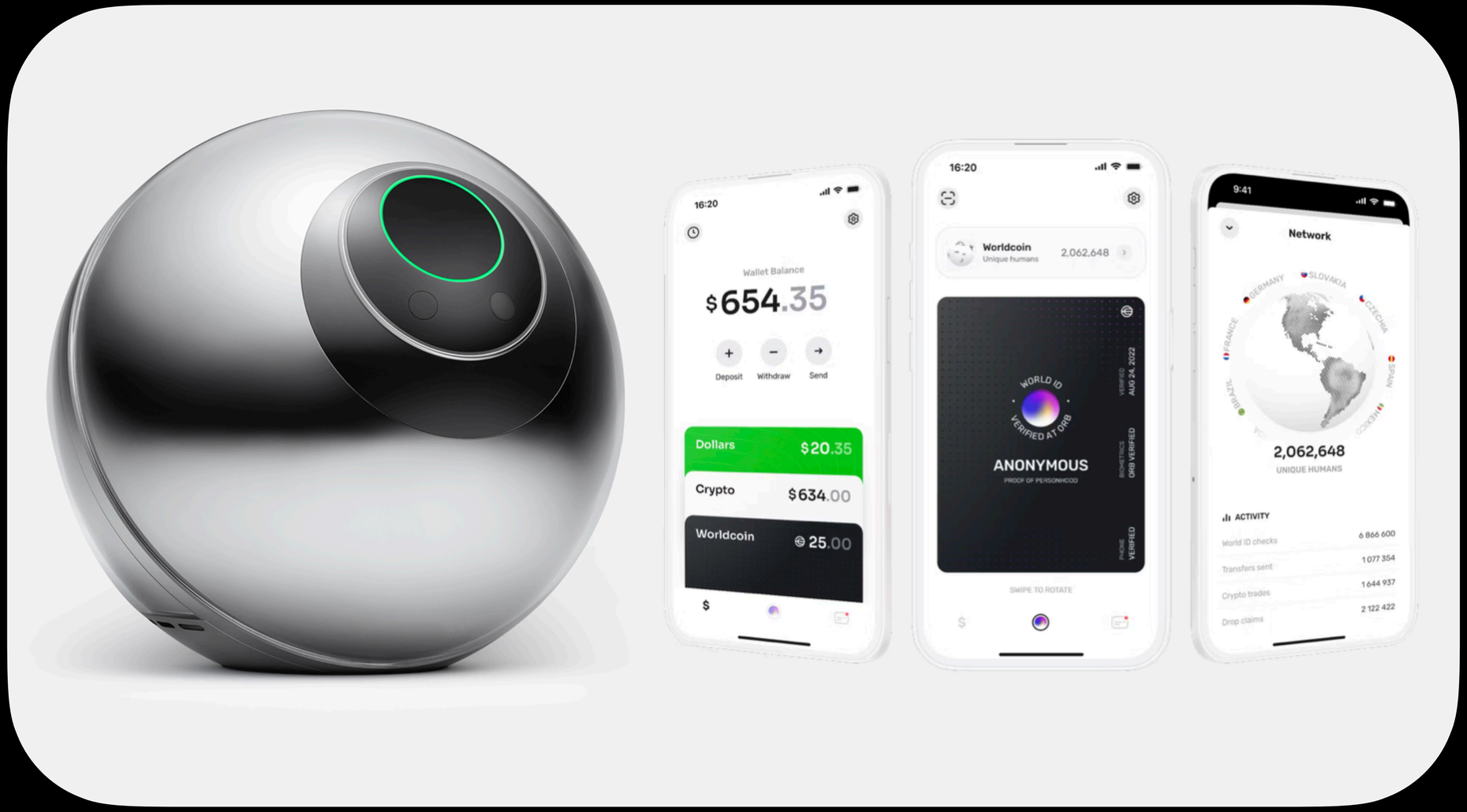
OPAL BLOCKCHAIN USES A **BRIDGE** TO WORLDCOIN BLOCKCHAIN

The bridge is called the Space Trade Exchange, or Space Tradex.

SPACE TRADEX

STX

Space Tradex would processes the duties collected from the manifest, and distribute them to Earth Citizenry as Universal Basic Income, by way of Worldcoin and it’s Orb Human Verification System.



WORLDCOIN AND ORB HUMAN VERIFICATION SYSTEM

This would be in line with the Treaty Governing the Activities of States on the Moon and Other Celestial Bodies, aka The Moon Treaty.

The Moon Treaty refers to, The Common Heritage of Mankind Principle.

It affirms that the natural resources of outer space are held in common by all nations, and should be distributed equitably for the benefit of all humankind.

THE COMMON HERITAGE OF MANKIND
NATURAL RESOURCES OF OUTER SPACE ARE HELD IN COMMON BY ALL NATIONS, AND SHOULD BE DISTRIBUTED EQUITABLY FOR THE BENEFIT OF ALL HUMANKIND

Capital looks for markets.

Investors seek to make profits.

But, they also seek the rule of law, protection of intellectual property rights, a stable currency, a sound banking system, limits on state intervention, and political stability.

The OPAL Blockchain can provide this.

The OPAL Blockchain is an ecosystem, much like the Swift banking system.

UNITED STATES
FEDERAL RESERVE SYSTEM

It might advantageous if we were to approach the OPAL Blockchain as a new Federal Reserve district on the moon, District 13, the Moon Monetary Authority (MMA).

DISTRICT 13
MOON MONETARY AUTHORITY

MMA D13

Pending the current value of XOPLs, they could be wrapped to equal 1 United States Space Dollar (USSD).

1 Wrapped XOPL = 1 USSD = 1 USD

With XOPLs being the foundational framework of a Space economy, like Vendor endeavors and moon resources, and XOPLs wrapped to a United States Space Dollar, in essence, it’s like creating a new incantation of the petrol dollar, for outward expansion.

USSDs could also be used for Lunar Vendor loans, and traded on world markets.

The Treasury would control the issuance of USSDs, and thus control the cost of our outward expansion.

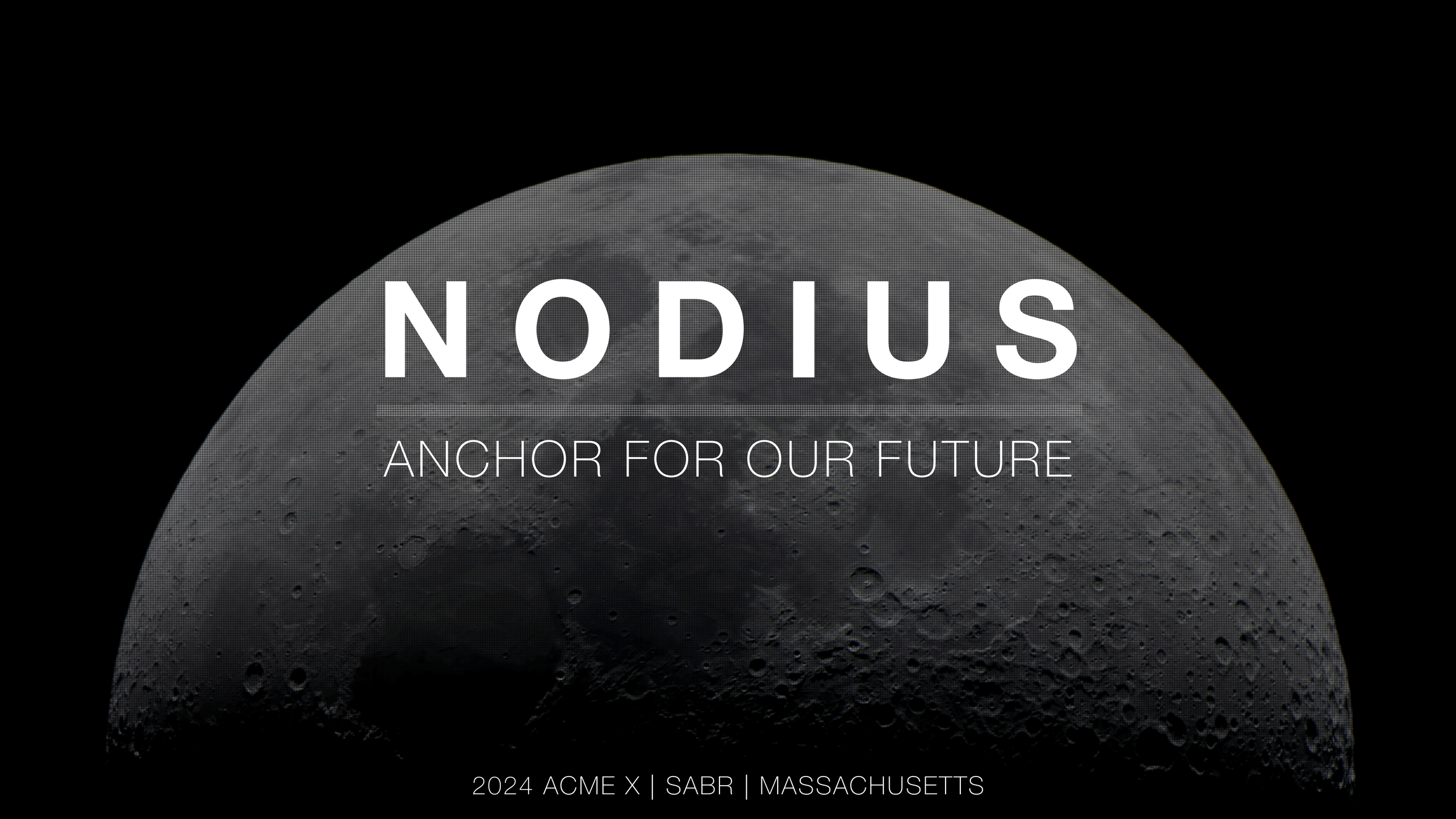
UNITED STATES SPACE DOLLAR USSD

1 WRAPPED XOPL = 1 USSD = 1 USD

SABR

SPACE APPROPRIATIONS & BLOCKCHAIN RESEARCH

LEE HOLMES FOUNDER | PROJECT ARCHITECT


NODIUS
ANCHOR FOR OUR FUTURE
2024 ACME X | SABR | MASSACHUSETTS