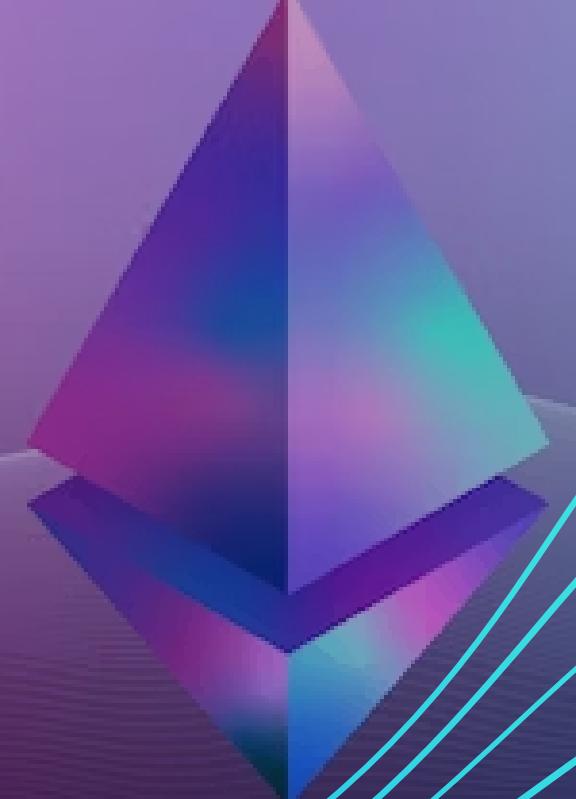


Ethereum

AND RELATED PROTOCOLS

The Ethereum logo, a stylized yellow hexagon composed of three interlocking triangles, is positioned centrally on a dark purple background. It is surrounded by a network of thin, glowing cyan lines that form a grid-like pattern, suggesting a blockchain or digital network.

ALESSIO ZEDDA

Most used protocols:

02

AS OF DECEMBER 2023

UNISWAP V3

Uniswap is a DEX, (decentralized exchange) built on the ethereum network that uses liquidity pools instead of book orders

COMPOUND

Compound is a decentralized lending and borrowing platform. Lenders then earn interest on the assets they deposit

AAVE

Aave is a decentralized and permissionless DeFi platform where users can instantly lend and borrow cryptocurrencies

OPENSEA

OpenSea is a decentralized marketplace for buying and selling non-fungible tokens (NFTs)

MAKERDAO

MakerDAO is a decentralized blockchain protocol on Ethereum that enables users to borrow and lend cryptocurrencies

UNISWAP

As previously mentioned uniswap is a decentralized exchange that allows users to swap cryptocurrencies.

PROS

- SWAP ERC-20 TOKENS
- USER-FRIENDLY DESIGN
- NO REGISTRATION REQUIRED
- ETHEREUM NETWORK (NO CUSTODIAL)

CONS

- DOESN'T ACCEPT FIAT MONEY
- RISK OF IMPERMANENT LOSS



COMPOUND

Compound is an Ethereum-based lending and borrowing protocol that algorithmically sets interest rates based on the activity in its liquidity pools.

PROS

- SAFE AND ESTABLISHED DEFI PROJECT
- NO MINIMUMS ON BORROWING OR LENDING
- NO TRADING FEES OR SLIPPAGE

CONS

- NOT SO USER FRIENDLY
- LIMITED TOKEN OPTION

AAVE

CREATIVE PORTFOLIO

Aave is a decentralized lending protocol that lets users lend or borrow cryptocurrency. It uses liquidity pools that can be provided by the lenders, which let them earn interest.

PROS

- LARGE LENDING POOLS
- COMPETITIVE RATES
- FLASH-LOANS

CONS

- NOT BEGINNER-FRIENDLY
- HACKERS HAVE EXPLOITED FLASH LOANS
- OVER-COLLATERALIZATION

OPENSEA

OpenSea is a non-fungible token (NFT) marketplace where users can buy, sell, or create NFTs. It is a noncustodial platform, allowing users full control over their crypto wallets.

PROS

- COMPETITIVE COMMISSION RATES
- BIGGEST SELECTION OF NFT
- ACCEPTS A WIDE VARIETY OF CRYPTOCURRENCIES
- MINIMAL GAS FEES

CONS

- LOTS OF SCAMS
- RISK OF FAKES
- PLAGIARIZED CONTENT
- HIGH MINTING FEES



NFT

MAKERDAO

MakerDAO is a decentralised autonomous organization (DAO) built on the Ethereum blockchain. It aims to create a stablecoin called DAI, which is pegged to the value of the U.S.

PROS

- DAI STABLECOIN, PEGGED TO 1 USD
- DECENTRALIZED GOVERNANCE
- OPEN SOURCE
- ALLOWS USERS TO COLLATERALIZE ETH TO GENERATE DAI

CONS

- ORACLE RELATED RISKS
- LIQUIDATION RISKS
- MECHANISMS CAN BE COMPLEX
- COLLATERAL VOLATILITY

Reccomendations

OPENSEA

NFTs on OpenSea could represent ownership or access to sustainable tourism-related items.

It can be used to tokenize unique travel experiences, certifications, or eco-friendly travel assets.

A suggestion would be to consider leveraging NFTs on OpenSea to create unique tradable assets linked to sustainable travel experiences or certifications.

Depending on the specific use cases and goals of the sustainable travel initiative these could be some hints:

- **Tokenization and Rewards:** Uniswap and OpenSea could be relevant for tokenization of assets and creating rewards or incentives for sustainable practices.
- **Stable Transactions:** MakerDAO's Dai can provide stability in transactions, avoiding the volatility associated with other cryptocurrencies.
- **Lending and Borrowing:** Compound and Aave can be explored for additional financial mechanisms to fund and support sustainable projects.
- **Decentralized Governance:** Protocols with decentralized governance models allow the community to actively participate in decision-making.

Top Features

Feature	Description	Possible link to sustainable tourism
Disintermediation	The peer-to-peer nature of the blockchain means the absence of a central authority	Tourists and travel service providers as well as local hosts can directly contact each other
Trust	All participants can trust each other and deal directly with each other	Tourists can express opinions and evaluate their experiences with different travel companies with full transparency
Costs	Costs can be cut due to the elimination of third parties	Cost savings for both tourists and travel service providers
Traceability	All transactions can be traced to authenticate their origin and path	Ensure that such products as seafood, lumber and other products sold as environmentally friendly really are
Integration of coins/tokens	The coins/tokens are used for more effective currency exchange, loyalty program, and rewards for review	Both tourists and local community can gain coins/tokens for realising sustainable tourism practices
Access to high-quality data to everyone	All parties involved in a transaction will have accurate, timely, consistent and complete data	The availability of information about the prices, travel service or product to all parties ensures that all tourists will be treated equally

In essence, applying blockchain technology to the tourism sector eliminates unnecessary middlemen, builds stronger trust among participants, reduces costs, enhances transparency and traceability and incorporates digital currencies like tokens. This not only promotes sustainable practices but also ensures fair and equitable treatment of tourists. The use of blockchain has the potential to revolutionize how transactions and interactions take place within the travel industry, making them more transparent and efficient.

SCREEN SOURCE

Virtual Exhibitions

I heard that you would like to implement the blockchain technology for your virtual exhibitions, here I wrote down some of the benefits it could provide:

People can own exclusive access like a special ticket.

Everyone gets a say in what's shown through a community-driven approach.

Art pieces can be like rare, digital collectibles that you truly own.

Fair payments for artists happen automatically with clear rules thanks to smart contracts.

You can buy tickets using cryptos, making it easy for anyone and anywhere.

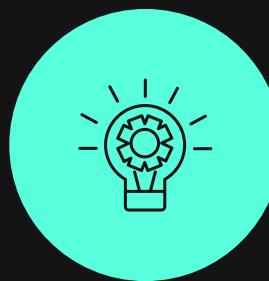
The virtual experience is not just a display but you can actively participate.

Get rewarded for joining in,

and the exhibitions are accessible to people all over the world,
making sure everyone can be a part of it.

Related risks

Although what I just mentioned sounds very promising and brings net improvements to the current tourism system there are risks and challenges related to it:



Legal and Regulatory Challenges

Making sure NFTs and virtual exhibitions follow the rules and laws is crucial for their safe and legal operation.



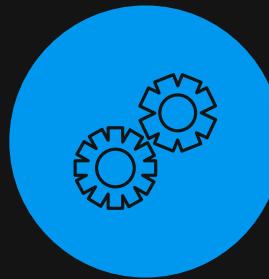
Cultural problems

Virtual exhibitions with cultural elements may face issues related to cultural respect and ethical concerns.



Cyber Security and Fraud Risks

Hacking and fraud risks are present in blockchain systems, so protecting digital assets and user data is crucial.



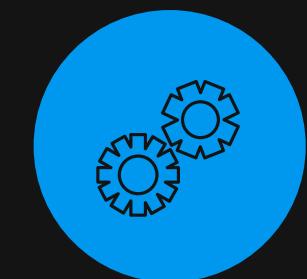
AML and CFT Challenges

Preventing illegal financial activities, such as money laundering and terrorism funding.



Gas Fees and Scalability

Controlling the fees for transactions and making sure the system can handle lots of users without getting slow.



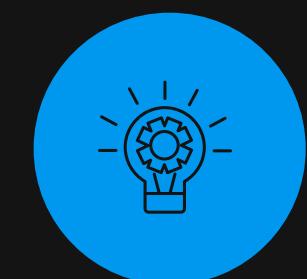
Lack of Regulation

Laws around NFTs and blockchain tech are still changing, and not having clear rules can be a challenge for virtual exhibitions.



Platform Reliability

Reliability of the platform hosting NFTs or virtual exhibitions is crucial for maintaining user trust and preventing disruptions.



Accessibility and Inclusivity

Some people may not have access to the technology needed for NFTs and virtual exhibitions, creating exclusion.

Transactions and tokens

To summarize the transactions and other movements done so far in the test-nets blockchains and non I'll use a blockchain explorer called etherescan.io

these screenshots show the various transactions made in the sepolia testnet, thanks to blockchains explorers you're able to see every single detail of a transaction and trace what occurred and where in each address

Transaction Hash	Method	Block	Age	From	To	Value	Txn Fee
0xa72419c5c124c98fc...	Deposit ETH	5039326	4 mins ago	0x43FCae...27670381	0x387d31...67d89F7D	0.1984 ETH	0.00476673
0xb29736a2289e7800...	Deposit	5039296	11 mins ago	0x43FCae...27670381	0xFF997...324d6B14	0.107 ETH	0.00052004
0x20dd3cf8fd5c2ac66...	Execute	5039294	11 mins ago	0x43FCae...27670381	0x3fc91A...4B2b7FAD	0.22484557 ETH	0.00307294
0xbeeacce82b14afb48...	Supply With P...	5039288	13 mins ago	0x43FCae...27670381	0x6Ae43d...ff738951	0 ETH	0.00360851
0x8fdc1468209dda219...	Withdraw	5039283	14 mins ago	0x43FCae...27670381	0x6Ae43d...ff738951	0 ETH	0.00519871
0x60b0d55544ed1f665...	Borrow	5028147	1 day 16 hrs ago	0x43FCae...27670381	0x6Ae43d...ff738951	0 ETH	0.01550006
0x79d592b81dd7c44d...	Supply With P...	5028138	1 day 16 hrs ago	0x43FCae...27670381	0x6Ae43d...ff738951	0 ETH	0.00916443
0xb13530d3544dc007...	Mint	5028130	1 day 16 hrs ago	0x43FCae...27670381	0xC95948...DEb3f42D	0 ETH	0.00270453
0x8e1dcebccf2876c53...	Mint	5028125	1 day 16 hrs ago	0x43FCae...27670381	0xC95948...DEb3f42D	0 ETH	0.00174074
0x2a87532c2bf5781a9...	Borrow	4963529	11 days 12 hrs ago	0x43FCae...27670381	0x6Ae43d...ff738951	0 ETH	0.00107586
0x0f9f995597aec068f...	Deposit	4962024	11 days 18 hrs ago	0x43FCae...27670381	0xFF997...324d6B14	0.05 ETH	0.00044046
0x6327646872b3c4e9...	Deposit ETH	4961999	11 days 18 hrs ago	0x43FCae...27670381	0x387d31...67d89F7D	0.02 ETH	0.00158006
0x220c5a49b27fbcba5...	Deposit ETH	4961991	11 days 18 hrs ago	0x43FCae...27670381	0x387d31...67d89F7D	0.002 ETH	0.00214102
0x922be65bf56294307...	Transfer	4961903	11 days 18 hrs ago	0x4281eC...0f3084eE	0x43FCae...27670381	0.25 ETH	0.0002565
0x789d38ce985361d4...	Transfer	4961898	11 days 19 hrs ago	0x203183...50DB2Ad5	0x43FCae...27670381	0.5 ETH	0.00053165

Sepolia

Here you can see the several tokens used in different protocols

Transaction Hash	Method	Block	Age	From	To	Value	Txn Fee	Token	Protocol
0xa72419c5c124c98fc...	Deposit ETH	5039326	7 mins ago	0x000000...00000000	0x43FCae...27670381	0.1984002	0.00000000	ERC-20: Aav....ETH	ERC-20: Aav....ETH
0x20dd3cf8fd5c2ac66...	Execute	5039296	14 mins ago	0x224Cc4...600c260C	0x43FCae...27670381	0.15742363	0.00000000	ERC-20: Uni....wap	ERC-20: Uni....wap
0xbeeacce82b14afb48...	Supply With P...	5039288	16 mins ago	0x000000...00000000	0x43FCae...27670381	50	0.00000000	ERC-20: Aav....AVE	ERC-20: Aav....AVE
0xbeeacce82b14afb48...	Supply With P...	5039283	16 mins ago	0x43FCae...27670381	0xb8558...Dc7E1259	50	0.00000000	ERC-20: AAV....AVE	ERC-20: AAV....AVE
0x8fdc1468209dda219...	Withdraw	5039283	17 mins ago	0x1804Bf...AeF6EefF	0x43FCae...27670381	0.76259373	0.00000000	ERC-20: WBT....BTC	ERC-20: WBT....BTC
0x8fdc1468209dda219...	Withdraw	5039283	17 mins ago	0x43FCae...27670381	0x000000...00000000	0.76259373	0.00000000	ERC-20: Aav....BTC	ERC-20: Aav....BTC
0x60b0d55544ed1f665...	Borrow	5028147	1 day 16 hrs ago	0xAF0F6e...d14310B6	0x43FCae...27670381	10,628.996938	0.00000000	ERC-20: USD....SDT	ERC-20: USD....SDT
0x60b0d55544ed1f665...	Borrow	5028138	1 day 16 hrs ago	0x000000...00000000	0x43FCae...27670381	10,628.996938	0.00000000	ERC-20: Aav....SDT	ERC-20: Aav....SDT
0x79d592b81dd7c44d...	Supply With P...	5028130	1 day 16 hrs ago	0x000000...00000000	0x43FCae...27670381	1.0011616	0.00000000	ERC-20: Aav....BTC	ERC-20: Aav....BTC
0x79d592b81dd7c44d...	Supply With P...	5028125	1 day 16 hrs ago	0x43FCae...27670381	0x1804Bf...AeF6EefF	1.0011616	0.00000000	ERC-20: WBT....BTC	ERC-20: WBT....BTC
0xb13530d3544dc007...	Mint	5028130	1 day 16 hrs ago	0x000000...00000000	0x43FCae...27670381	100	0.00000000	ERC-20: AAV....AVE	ERC-20: AAV....AVE
0x8e1dcebccf2876c53...	Mint	5028125	1 day 16 hrs ago	0x000000...00000000	0x43FCae...27670381	1	0.00000000	ERC-20: WBT....BTC	ERC-20: WBT....BTC
0xc14b34402f0e1e7c2...	Transfer ERC20	4963529	8 days 29 mins ago	0x3ebE67...819721Cb	0x43FCae...27670381	1,800	0.00000000	ERC-20: USD....oin	ERC-20: USD....oin
0x2a87532c2bf5781a9...	Borrow	4962024	11 days 12 hrs ago	0x1804Bf...AeF6EefF	0x43FCae...27670381	0.0011616	0.00000000	ERC-20: WBT....BTC	ERC-20: WBT....BTC
0x0f9f995597aec068f...	Deposit	4961999	11 days 18 hrs ago	0x000000...00000000	0x43FCae...27670381	0.0011616	0.00000000	ERC-20: Aav....BTC	ERC-20: Aav....BTC
0x6327646872b3c4e9...	Deposit ETH	4961991	11 days 18 hrs ago	0x000000...00000000	0x43FCae...27670381	0.02	0.00000000	ERC-20: Aav....ETH	ERC-20: Aav....ETH
0x220c5a49b27fbcba5...	Deposit ETH	4961991	11 days 18 hrs ago	0x000000...00000000	0x43FCae...27670381	0.002	0.00000000	ERC-20: Aav....ETH	ERC-20: Aav....ETH
0xa97c8c24ed219eb3...	Transfer	4961903	11 days 19 hrs ago	0x4281eC...0f3084eE	0x43FCae...27670381	25	0.00000000	ERC-20: Cha....ken	ERC-20: Cha....ken

The first two transactions are the ones that provided sepoliaETH from faucets, that's the reason they're shown as "in"

Other networks

The screenshot shows a wallet interface for the Mainnet. At the top, it displays the address 0x43FCaeC418Cf4F5c40c13d3296B3256827670381. Below the address, there are tabs for 'Buy', 'Exchange', 'Play', and 'Gaming'. A sponsored banner for 'MetaWin' is visible. The main area is divided into sections: 'Overview' (ETH BALANCE: 0.020520464559709443 ETH, ETH VALUE: \$45.94 (@ \$2,238.82/ETH), TOKEN HOLDINGS: \$44.09 (1 Tokens)), 'More Info' (PRIVATE NAME TAGS, LAST TXN SENT, FIRST TXN SENT), and 'Multichain Info' (\$90 (Multichain Portfolio), 2 addresses found via Blockscan). A cartoon illustration of SpongeBob SquarePants and Mr. Krabs is shown. Below these sections is a table of transactions:

Transaction Hash	Method	Block	Age	From	To	Value	Txn Fee
0x3bf21a2f08200fa1e...	Transfer	18893091	8 days 15 hrs ago	0x357c6F...81A8f0cc	IN 0x43FCae...27670381	0.01492 ETH	0.00050032
0x44aca582e4d80aee...	Transfer	18893029	8 days 15 hrs ago	0x43FCae...27670381	OUT 0x73BcE7...7CCdd0EE	0.005 ETH	0.00071787
0x84e9525c50db947c...	Transfer	18869751	11 days 22 hrs ago	0x27899f...9EE60FD6	IN 0x43FCae...27670381	0.01131834 ETH	0.0003927

Mainnet

I also managed to swap some Ether bought on the Optimistic Network onto the Mainnet to get a feel for what it's like to pay fees and what would be the best way to swap them. Thanks to exchanges and the USDT stablecoin, I was able to keep the losses to a minimum.

The screenshot shows a wallet interface for the Goerli network. At the top, it displays the address 0x43FCaeC418Cf4F5c40c13d3296B3256827670381. Below the address, there are tabs for 'Buy', 'Exchange', 'Play', and 'Gaming'. The main area is divided into sections: 'Overview' (ETH BALANCE: 0.04535 ETH, TOKEN HOLDINGS: \$0.00 (4 Tokens)), 'More Info' (LAST TXN SENT: No transactions sent, FIRST TXN SENT: No transactions sent), and 'Multichain Info' (3 addresses found via Blockscan). Below these sections is a table of transactions:

Transaction Hash	Method	Block	Age	From	To	Value	Txn Fee
0x6797679b38f13481...	Transfer	10274479	11 days 18 hrs ago	0x6Cc939...7Ba5F455	IN 0x43FCae...27670381	0.02535 ETH	0.000042
0x9fe6e71d3160c9004...	Transfer	10273687	11 days 22 hrs ago	0x631E9B...8a668d20	IN 0x43FCae...27670381	0.02 ETH	0

I couldn't really use the goerli network as it's deprecated from 2023, so the only transactions I was able to do were those from the faucets to my wallet.

Thank you

Hoping I've provided a helpful summary of the benefits and challenges that NFTs and blockchain could offer to your business.

I look forward to hearing your thoughts. For any further explanations feel free to reach out to me via email at alessio.zedda@outlook.it,
Kindest regards.

ALESSIO ZEDDA