

UN SDGs & Blockchain discussion

Topics

- Overview of selected UN SDGs Social Development Goals
- WEF perspectives priorities and strategies for some SDGs
- Discussion
- How blockchain solutions can help support SDGs?
- Key challenges delivering blockchain solutions today?
- Next Steps?



Jim Mason

Hyperledger Public Sector Leader

Thought leadership in Blockchain, AI, Data, Governance, Automation

Online | Friday, April 26th at 10 AM EDT / 14:00 UTC economies with new technologies

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Post in a group

Please join us for a short presentation and discussion on selected UN SDGs and value blockchain offers.

Presented by <u>Hyperledger Public Sector Group</u> and <u>Boston Hyperledger Meetup</u>. Leading the discussion: Jim Mason

Agenda

- Overview of selected UN SDGs Social Development Goals
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Selected UN SDGs

SDG-1 No Poverty

SDG-2 Zero Hunger

SDG-3 Good Health & Well Being

SDG-7 Affordable & Clean Energy

SDG-12 Responsible Consumption & Production

SDG-13 Climate Action

WEF views on UN SDGs

WEF

The World Economic Forum (WEF) is an independent international organization committed to improving the state of the world. As stated in its mission, it, "engages business, political, academic and other leaders of society to shape global, regional and industry agendas."

Key Points

- Wars, Ukraine invasion, made poverty, hunger and healthcare all worse.
- efforts to coordinate a response require comprehensive global partnerships.
- Covid prevention, treatment improved healthcare
- Time running out to meet 2030 goals

Blockchain capabilities list

Availability - **decentralization** improves system resilience, availability Traceability - all transactions recorded on ledger provide transparency, traceability Immutability - linked, hashed data records ensure data can't be changed Efficiency - shared ledger for parties saves time, costs to process transactions Reduced fraud - Digital IDs, credentials reduce fraud with signed transactions Private data - Permissioned ledgers with encrypted data ensure privacy Private data - ZKP - Zero Knowledge Proofs get personal data private Trusted transactions - Smart contracts run automatically on trusted ledger data Accurate assets - Digital Asset Tokens allow accurate ID & tracking of assets Safe assets - Digital custody services can protect assets different ways Approval tracking - Consent management makes tracking approvals easy WEF Blockchain Toolkit Model Summary on blockchain features

Blockchain Solutions (Hyperledger)

Digital Identity, Credentials - HL Indy, Aries, Ursa, ID.me, VONX. GLEIF, Asset IDs Food Supply Chain - Farm2Plate.io , IBM Food Trust

Payments - UDPN, Swift, RLN

Trade Finance - GSBN, Trust Your Supplier, bluenumber.org

Supply Chain & Manufacturing - Honeywell, Deloitte

Banking, Bond & Security, Futures trades - JP Morgan, RLN, DTCC, Citi .. others

Digital Asset Custody - Fidelity, Bitbank, JP Morgan .. more

Crypto exchanges - Binance, Coinbase, Coinmarketcap

Mobility - MOBI network, Smart cities

Healthcare - Covid vaccinations, BurstIQ, EHR (Patient data privacy)

Public Sector - Estonia, British Columbia, State of RI

Risk - Insurance, Digital Rights, IP, Media, Real Estate,

Climate - Savimbo, Carbon Mgt, P2P energy, Environment Quality Eng

SDG-1 No Poverty

Targets

reduce poverty 50% give economic, tech resources provide social protections reduce disaster impacts

DLT capability value

Self-sovereign IDs can give poor IDs Digital currencies = faster payments Digital assets = track asset ownership

Examples

Indy identity network run by stewards Secure Dapps to trade goods from mobile Mobile payments with crypto, fiat exchange

SDG-2 Zero Hunger

Targets

End hunger,
achieve food security
improve nutrition
promote sustainable agriculture

DLT capability value

Reduced fraud with digital identity - KYC
Provenance and traceability of products
Wider access with mobile digital payments
Digital Currencies (see India eRupee)
Digital Identity (see India Aadhaar)

Examples

Farm2Plate.io
India Aadhaar ID
India eRupee currency
TYS - Trust Your Supplier

SDG-3 Good Health & Well Being

Targets

Ensure healthy lives promote well-being for all at all age

DLT capability value

Identity protection, Credentials validations
Privacy - EHR (Patient Health records)
Traceability - medications, clinical trials
Consent Management for treatments

Examples

<u>BurstIQ - Personal Health, Identity Security</u> Avaneer Health: accurate claims processing

ProCredEx - Health credentials exchange

SDG-7 Affordable & Clean Energy

Targets

Ensure access to affordable, reliable, sustainable and modern energy for all

DLT capability value

KYC - less identity fraud Energy trading - faster, cheaper Better compliance in energy chain Digital Asset tracking of energy

Examples

EBC P2P solar energy trading market EV battery recharge grid management

SDG-12 Responsible Consumption & Production

Targets

Ensure sustainable consumption and production patterns.

DLT capability value

IDs withh KYC - less identity fraud Efficient processing on shared ledger Traceability for shipments Secure payments Easier compliance

Examples

GSBN - Global Shipping Business Network Farm2Plate.io - food chain safety GAAP - Genuine Alaska Pollock Producer

SDG-13 Climate Action

Targets

Take urgent action to combat climate change and its impacts

DLT capability value

KYC - less identity fraud Traceability for ESG with IoT Better compliance on regulations

Examples

Savimbo - sustainable forests Carbon trading markets Data Gumbo waste water mgt Sybal.io proof of governance

Blockchain Limitations

Challenges on Blockchain Solutions

Evolving Technology - Not Mature

Blockchain Failures

Scalability

Interoperability

Real Governance evolving

Authenticity risks from Quantum, GenAl

Trust engineering not well done

Solutions Not VCE - sustainable value

More ??

Issues are

Technology maturity

Engineering not good enough

Solutions not VCE based

Standards not mature, well done

Commercial solutions have limited

markets

Open source solutions need sustainable

funds

Education for organizations, users, tech

Resources

khub sts

khub TOIP trust engineering

Digital ID advantages article

Blockchain-technology-in-trade-finance

blockchain in healthcare apps







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Online | Friday, April 19th at 10 AM EDT / 14:00 UTC Oriving value chain https://tinyurl.com/3f98s952

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