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WORLD SUMMIT ON THE INFORMATION SOCIETY **WSSS+20 FORUM** HIGH-LEVEL EVENT 2024

27-31 May 2024 Geneva, Switzerland

www.wsis.org/forum #WSIS

Co-hosts



Swiss Confederat

Ð

Co-organizers



WSIS+20 FORUM 27-31 May 2024 HIGH-LEVEL EVENT 2024 Geneva, Switzerland Innovate Discuss Share

Innovate



United Nations Joint Staff Pension Fund

Blockchain and Biometric-based Digital Identity Solution

29 May 2024 at 10:00 AM



Dino Dell'Accio UNJSPF



Msgr. Lucio Adrian Ruiz Holy See



Discuss

Share

Sandra Ro GBBC



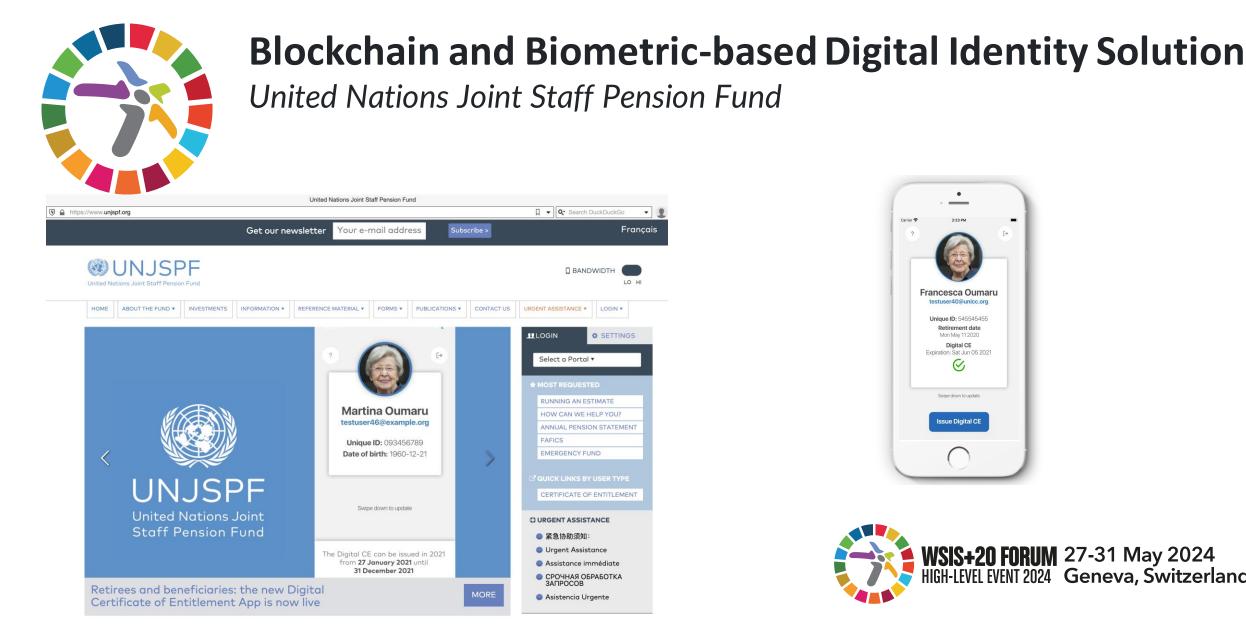
SIS+20 FORUM 27-31 May 2024 GH-LEVEL EVENT 2024 Geneva, Switzerland



Scott Stornetta Yugen Partners



UNICC









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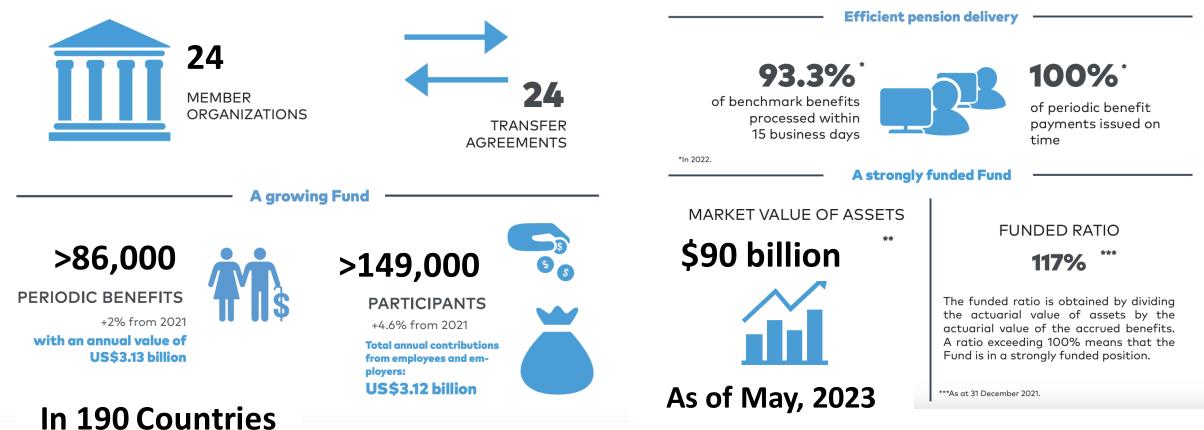
United Nations Joint Staff Pension Fund







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In 18 Currencies



UNJSPF Digital CE The Problem

Transform a 70-Year-Old Manual Process



- Involving >84 Thousand UN Retirees & Beneficiaries
- Residing in >>190 Countries
- Using Paper-Based Forms
- Transmitted through >190 Postal Services
- Prone to Delays + Errors + Questioning (Negative Proof)
- Causing in same cases Suspension of Payments



UNJSPF Digital CE

The Challenge(s) Addressing & Providing 4 Proofs



2. Proof of Existence

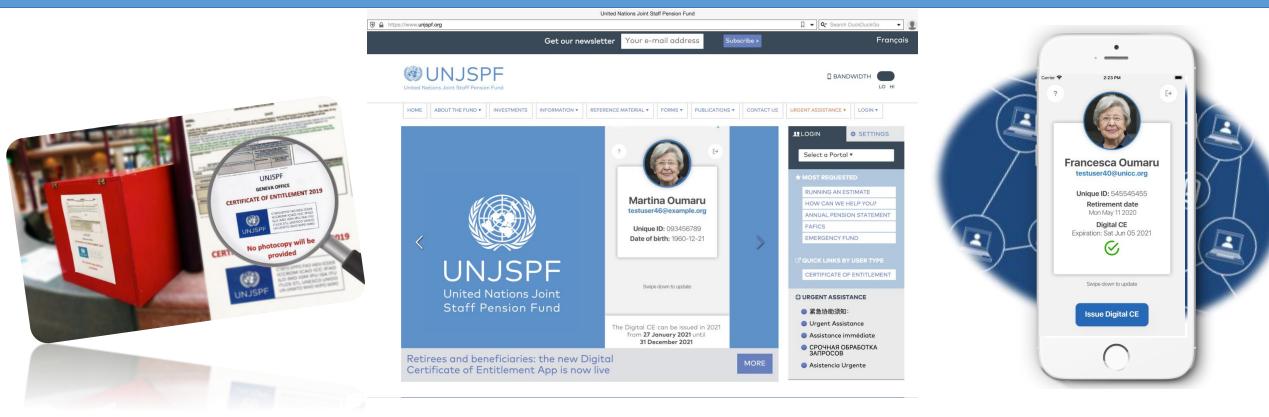
3. Proof of Transaction

4. Proof of Location



UNJSPF Digital CE

The Solution



Transformed

From: A manual 'paper & mail' Certificate of Entitlement Process To: A Blockchain and Biometric-based solution using Mobile App



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UNJSPF Digital CE How?





Blockchain: Used to Provide Proof of Identity & Transaction





Independently Auditable

Traceable

Triple-Entry Distributed Ledger



WHY BLOCKCHAIN?

Because Governing Bodies & Stakeholders Demand Accountability





WHY BLOCKCHAIN?

Because Governing Bodies & Stakeholders Demand Accountability

1. Prevent/Detect Collusion: NO CENTRAL CONTROL (i.e., DB Admin.)

2. Control over WHO CAN PARTICIPATE but OPEN TO EVERYBODY TO READ

3. Support PRIVACY with Zero-Knowledge Proof & Tamper Proof Ledger

4. Create/Maintain/Audit an (IMMUTABLE) Ledger



Biometrics: Used to Provide Proof of Authentication



Facial Recognition

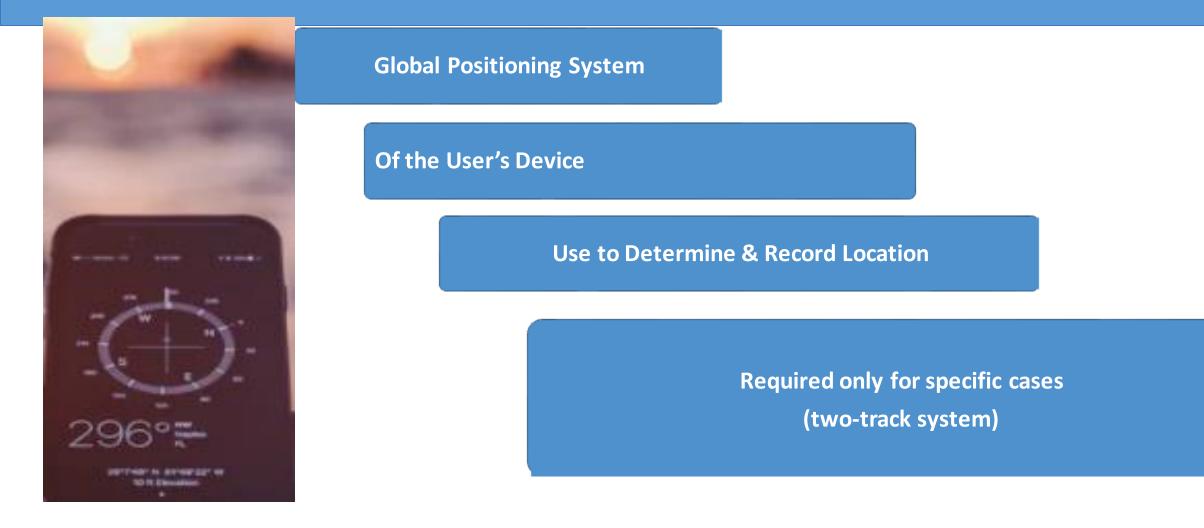
Stored only on the User's Device

To Authenticate Users

With Events Recorded on the Blockchain



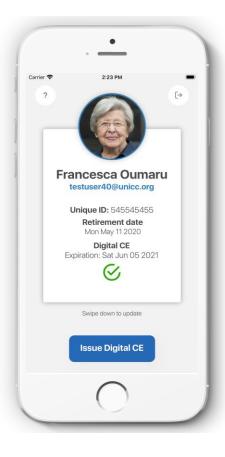
GPS: Used to Provide Proof of Location





ENHANCEMENTS

Al for Security & Kiosk Mode to Reduce Digital Divide









ASSURANCE

International Telecommunication Union	INTERNATIONAL ISO/IEC STANDARD 27001	
	Second edition 2013-10-01	
ITU-T Technical Specification		
TELECOMMUNICATION STANDARDIZATION SECTOR (1 AUG 2019) OF ITU	Information technology — Security techniques — Information security management systems — Requirements	
	Technologies de l'information — Techniques de sécurité — Systèmes de management de la sécurité de l'information — Exigences	
ITU-T Focus Group on Application of Distributed Ledger Technology (FG DLT)		
Technical Specification FG DLT D3.3 Assessment criteria for distributed ledger		
technology platforms		
	Reference number ISO/IEC 27001:2013(E)	

ISO IEC

© ISO/IEC 2013



ASSURANCE



m

United Nations Joint Staff Pension Fund (UNJSPF)

1 Dag Hammarskjöld, Plaza (DHP)), Corner of 48th Street and 2nd Avenue New York, NY 10017 USA

This is a multi-site certificate, additional site(s) are listed on the next page(s)

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO/IEC 27001:2013

Scope of certification

The management of an Information Security System for Securing the UNJSPF's Integrated Pension Administration System IIPASI and Digital Certificate of Entitlement IDCEI that encompasses the United Nations Joint Staff Pension Fund's offices in New York, Geneva, and the UNICC Data Centers in Geneva, Switzerland and Piscataway, NJ, covering the operation, maintenance and management of IPAS as well as the Digital Centers in Geneva, Switzerland and Piscataway, NJ, covering the operation, maintenance and management of IPAS as well as the Digital Centers in Geneva, Switzerland and Piscataway UNLSPF VINCE and UNICC Geneva Office. The user support for beneficiaries is provided by UNLSPF / UNICC helpdesi.

Statement of Applicability Version number and release date : v3.0/ 03.11.2021

Original cycle start date:	09-March-2022
Expiry date of previous cycle:	NA
Certification / Recertification Audit date:	25-December-2021
Certification/Recertification Cycle Start Date:	09-March-2022
Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on:	08-March-2025

The Digital Certificate of Entitlement Algorithmic Assessment

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ACKNOWLEDGMENTS





01/29/2021

Gartner.

Case Study: Digital Transformation of a Legacy Paper-Based Process (U.N. Joint Staff Pension Fund)

Published 28 January 2021 - ID G00739406 - 9 min read

Dean Lacheca

Initiatives: Government Digital Transformation and Innovation; Government Technology Optimization and Modernization

Governments worldwide are turning to emerging technologies to help modernize traditional processes. Government CIOs can gain insight from how the United Nations Joint Staff Pension Fund has utilized blockchain, biometrics and geolocation to reinvent a legacy process with a global audience.



Organization Name: United Nations Joint Staff Pension Fund (UNJSPF)

Industry: Pension Fund Management, Government

Main Location: New York, U.S.

Revenue: Not Applicable

Employees: ~200 (2020)

Overview

The Digital Certificate of Entitlement (Digital CE) project at United Nations Joint Staff Pension Fund (UNJSPF) was selected as a finalist in Gartner's Eye on Innovation Awards for Government 2020. It was selected as it demonstrated how emerging technology can be combined to allow the service to be delivered in a completely different way, improving integrity and efficiency (see Table 1).

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UN Digital ID Programme

Dimitra RALLI

OIC Programme Director UN System Digital ID Programme



UN Digital ID

Core identity 17 Feb, 2023

UN Digital ID

eceive credentials fror

Credentials are safely stored on your device

Create new wallet

Restore existing walle

UN Digital ID

A digital identity for UN personnel

USP III

UN Digital ID

Marital status 17 Feb, 2023 What it is ... What it is NOT ... Goal × Emergency contact 17 Feb. 2023 A **digital wallet** that a database To provide the UN will store workforce with a .d 🕆 🚍 0 a replacement for ERP universal and easy-toelcome to UN Digital ID UN staff member's or any other legacy use system wide digital ID and verifiable systems identity UN Digital ID credentials and Credential added Share your data when and with whom you want designed to harmonize To enable will be used to share existing administrative Go to Wallet interoperability data between UN processes between organizations organizations and without being invasive systems on ecosystems = UN Digital ID Scan QR Code

Discuss Innovate Share

Key Considerations

- Align with the SG's UN 2.0 Quintet of Change, focusing on innovation and data [SG Report 2021-09].
- Promote a 'common UN identity,' based on shared values of solidarity and commitment to the UN's mandate.
- Leverage current systems and initiatives, including mutual recognition.
- Ensure least disruption to the existing systems and business processes.
- Deliver impact with successful outcomes, and soon.



Benefits

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What's in for the UN personnel

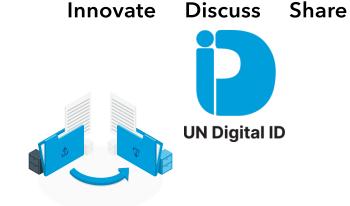
- Ownership and control of the data
- Transparency on the records
- Effortless and secure record sharing

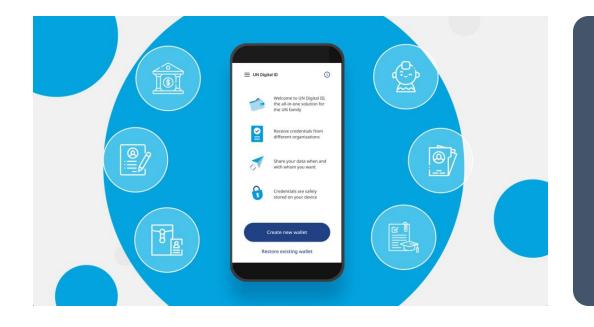
What's in for the Organizations

- Transparency on the management and quality of data
- Seamless information exchange
- Increased efficiencies in the long term



A universal data exchange platform





- Built on opensource technology
- Allows expansion to unlimited use cases onboarding, separation, medical, security, mandatory trainings, etc.
- MVP for separation: The "Pension" use case

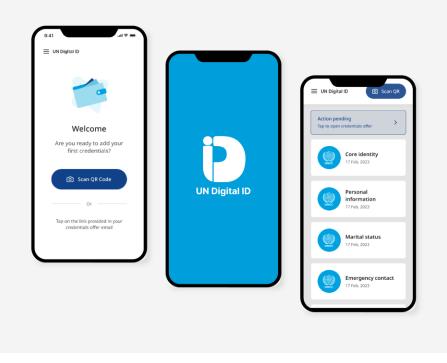
The solution technology

Blockchain

- Technology to create and manage immutable, traceable, and independently auditable records
- Permissioned
- Stores only credential definitions, schemas and verification data
- No user data stored in the blockchain







The solution components

User App

- A digital-wallet mobile app for users to validate and share their data
- Installed on the user's mobile device
- Data stored in the app

ID Manager

- Component to interact with each organization's ERP
- Each organisation has full control of what, when and to whom credentials are sent, revoked, or modified using their own systems
- Each ERP remains the "source of truth" of the credentials



0

MVP – The Pension Use Case

First release: **3 June 2024**

Enables the employer and the separating staff member to

share verified data with UNJSPF via the staff's Digital ID wallet

so their pension benefits can be processed with minimum delay.

Each organization can issue verifiable credentials and are stored in the UN digital wallet

UNJSPF can consume verifiable credentials from the UN digital wallet



Staff separating from the UN system have created their UN Digital ID

Participating organizations to date

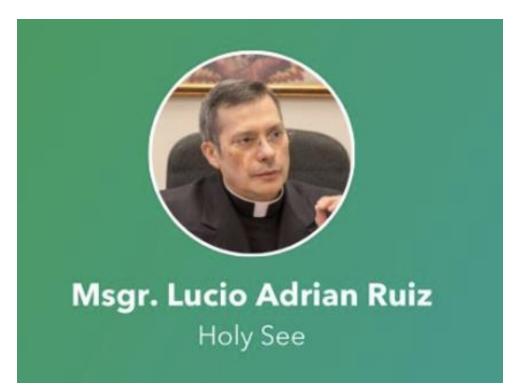






UNICC is the technology solution and service provider

UNJSPF





1- Science and technology are not morally neutral

2- Seeing and hearing

are essentially anthropological issues

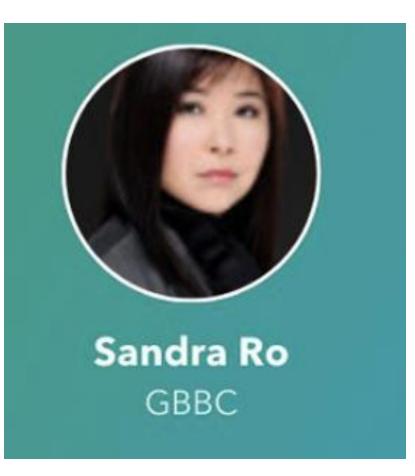
3- Truth and objectivity

are not the prerogative of machines

4- Technological progress

does not necessarily result in progress for humanity

5- Conclusion



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World Summit on The Information Society (WSIS)

29 May 2024

Sandra Ro

CEO, GBBC







Global Blockchain Business Council (GBBC) is the largest leading industry association for the blockchain technology and digital assets community

> Learn more about GBBC and how to join: **gbbc.io**



Interactive Map of Regulatory Developments from 232 Jurisdictions & 6 International Bodies



Taxonomy & Definitions for

220+ Key Terms



Blockchain and Digital Assets Landscape with 2.000+ Stakeholders



Accredited Universities offering 1,500+ Courses & Professional Certifications



60 Technical

Standards Bodies

Advancing Blockchain

Developments

WTIH IN-DEPTH REPORTS ON:

Supply Chain





Sustainability



AI Convergence



Digital Identity

GSMI 5.0 (2024)

INTERACTIVE REGULATORY MAP LANDSCAPE OF STAKEHOLDERS **COURSE MAP WORKING GROUPS ON:**

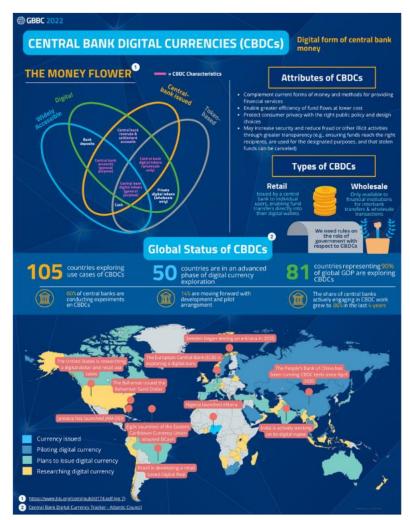
- TAXONOMY
- TECHNICAL STANDARDS
- SUPPLY CHAIN
- SUSTAINABILITY
- AI CONVERGENCE
- DIGITAL IDENTITY
- DECENTRALIZED FINANCE

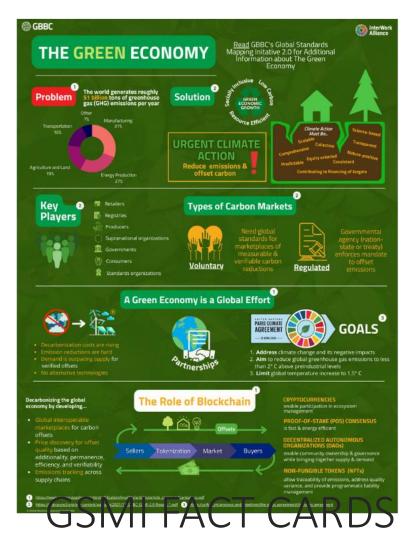
COUNTRY SPOTLIGHT ON INDIA





ACCESS GSMI: HTTPS://WWW.GBBCOUNCIL.ORG/GSMI





GBBC Blockchain technology enables transparency and **BLOCKCHAIN FOR TAXATION #** trust between governments and citizens, including 1 With limited visibility on tax payments, countries fail to collect PROBLEM revenue owed to them and lose over \$427B in taxes per year Revenue Diversion & Tax Evasion Through Legal & Effects on public services can be significant From Multinational Average tax revenue loss as Average tax revenue loss as % of total tax revenue % of health expenditure fotal revenue loss **Corporations & Private** per yea Gened with January 2021 World Gar 2 SOLUTION Traceable revenue improves accountability, bringing a holistic view of taxpayer obligations and corresponding payments Certainty for taxpayer and administrator that Data immutability and transparency to empower the tax function and support taxable event occurred, authentication of actors better policy design and data to assess tax implications with other government services (e.g., trade, administer compliance with tax obligations social services, justice, welfare distribution) Tax Authorities Can... TAX AUTHORITIES EXPLORING BLOCKCHAIN Join decentralized trust networks Blockchain ensures data is not manipulated to benefit tax processes, law, and policy · Oversee real-time tax collections Balancing privacy and transparency improves data sharing across jurisdictions and functions Make decisions on tax events as • Increase trust from citizens with accountability Finnish Tax Panama Genera Revenue Directorate NK Nerwegien To Ner Miseity State Taxation 0 2120/ 😰 GBBC GSMI 2.0 Record Provember 20

ACCESS FACT CARDS: HTTPS://WWW.GBBCOUNCIL.ORG/GSMI/#FACT

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Blockchain Tech: Data Trust Anchor for GenAl

• Visibility on Algorithms - Blockchain adds a layer of transparency into Al developments

• **Transparency on Data Provenance -** Creates transparency into the source of data sets, helping identify risks of biased, or narrowly focused data sources

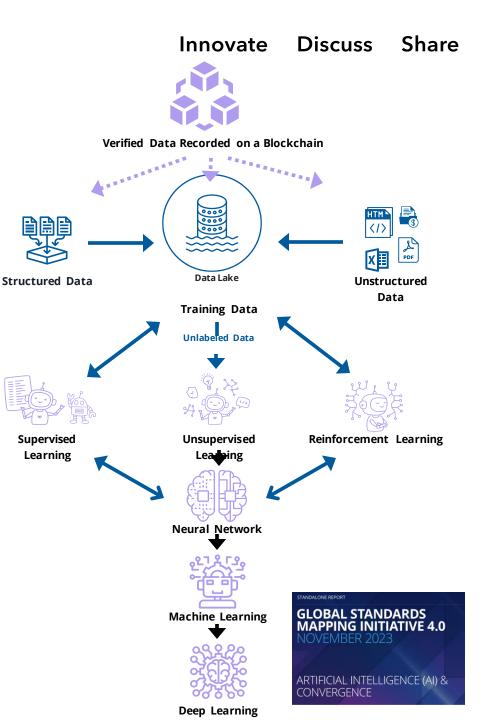
• **Transparency on Al Outcomes -** Provides transparency into the uses and outcomes of Al, such that accurate records can be preserved for monitoring and evaluation of results

• **Data Privacy and Security** - Improves privacy protection mechanisms, which can safeguard the privacy of individuals while ensuring security and dependability of data

• Decentralization to Address Power Concentrations - Can prevent concentration of power and single points of failure, adding resilience and trust

• New Processes to Preserve Equality - Reinvents processes, such that automation doesn't lead to job losses where the same functions are replaced by machines

Source:gbbcouncil.org/wp-content/uploads/2023/12/Standalone-AI-GBBC-GSMI-4.0-Update.pdf



INTERWORK ALLIANCE

GLOBAL TAXONOMY AND TOKEN STANDARDS

WHAT IS IT?

IWA is a tokenization hub for organizations to collaborate on market-driven, open-source, standards and taxonomy

IWA's Token Taxonomy Framework (TTF) is an open-source resource library that simplifies a common language to describe tokenization attributes, behaviors, and data properties for organizations

WHAT HAS IWA DELIVERED?



LEARN MORE ABOUT IWA







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Made Uniquely Possible with Hedera Guardian

Compare Methodologies

Understand different methodologies and data requirements at scale across different registries and project developers.

Real-Time Updates

Automated project data updates can be directly tethered to different methodologies, allowing for live impact monitoring and ongoing reporting.

Granular Data tracking

Track and trace climate and sustainability data down to the individual unit of measurement, proving total transparency on the impact of complex projects.

Privacy and Transparency

Trace climate and emissions data to the source while protecting personal and proprietary information using cutting edge technology.

Collaborate with an aligned ecosystem

Benefit from the collective knowledge base of aligned stakeholders to drive methodological improvements.

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6		Token & Is	isuer 🖸 VC File					· •	CDM ACM0006
<u> </u>	Projects								CDM ACM0007
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United Nations Joint Staff Pension Fund



Thank You

