Facilitating crossborder data sharing

CADENA

Solution to facilitate the implementation of MRA/AEO with Blockchain
Why adoption of technology is so important now?

1. The supply and demand concept..
   - Need for **efficiencies** (time and cost reduction) and for improving **trade integrity**
   - Availability of new technologies to support the needs

2. Great leverage when maximizing **synergies among new technologies**
   - To synchronize the movement of physical flows with regulatory aspects and financial flows

3. Adoption of new technologies is key to **expand the opportunities to use digital data** ....
   - Captured or obtained by IOT, Biometrics
   - Processed by Cloud Computing
   - Analyzed by AI/ML, Big Data
   - Exchanged/distributed by DLT/Blockchain
Blockchain solution to facilitate cross border data exchange of AEO certificates, between 8 countries / 14 MRAs in LAC (Mexico, Guatemala, Costa Rica, Colombia, Peru, Ecuador, Bolivia and Chile).

Deployed on LACCHAIN, a public permissioned regional blockchain infrastructure.

IDB promoted and funded the design since 2018, but it was built and implemented by customs teams to develop and to strengthen capacity on new technologies.

After a successful validation phase with real data, currently looking into moving to a production phase.
Key considerations and lessons learned from CADENA

1. **Adopt an inclusive co-creation design and implementation** approach to guarantee regulatory alignment, functionality of the processes and the technological viability of the solutions, in collaboration of the private sector, international organizations and academy.

2. Consider the proof-of-concept phase as a **learning process to develop capacity and skills, and as a contribution to the evolution and global technical discussion**.

3. Think small when choosing a business case to validate the technology but **THINK BIG when choosing the blockchain infrastructure (the ecosystem or network)** to better address sustainability, and specifically governance, scalability, interoperability and integration issues.
Key considerations and lessons learned (2)

4. **Opt for Open-source code** and document it in shared repositories (Githubs)

5. **Apply standards** for technical, organizational, legal and semantic interoperability:
   - W3C Identifier and Credential Standards: **Decentralized Identifiers DID and Verifiable Credentials VC**
   - Standardized APIS for integration
   - WCO Data Model

6. **Iterate and establish milestones** for functional and integration tests to identify areas for improvement. And be willing to be **flexible and take some risk** during the proof-of-concept phase
Thank you!

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