

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 maximazing **synergies amongs 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

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- 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.

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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

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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

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Thank you!

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